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INTRODUCTION

Introduction

In the aftermath of the Lahaina wildfire, House Speaker Scott K. Saiki established six interim working groups charged with evaluating specific topics related to the wildfire and making recommendations for appropriate legislative action in the 2024 Regular Session. Members of the bipartisan working groups collaborated with federal, state, and county agencies, along with community stakeholders and interested parties, to identify immediate issues that require temporary or transitional relief for the people and businesses of West Maui. Each working group produced a draft report that was made publicly available on November 1, 2023, for the purpose of receiving comments and feedback from the public. From these efforts, the individual working groups compiled several findings and recommendations in each of their respective subject matters and consolidated that information into this comprehensive report.

Collectively, the working group discussions were informative and at times dynamic, as a flurry of ideas and issues were presented. The initial lack of information about the wildfire meant that the working groups had to make logistical and topical pivots as information was updated and became available and circumstances changed. In an effort to obtain real-time, first-hand information and to gain a heartfelt understanding of the tragic circumstances surrounding the wildfire, some working groups undertook site visits to Lahaina and also held public meetings with the broader Maui community. Coordination among federal, state, and county agencies, as well as community stakeholders, regarding the sensitive nature of the issues often meant deliberations took a considerable amount of time and care, particularly to ensure that concerns were being addressed and resources effectively utilized. Lastly, amid the discussion for potential short- and long-term recommendations, it was imperative that the working groups prioritized listening to the concerns of the people and businesses of Lahaina to ensure that all ideas were shared and all voices were heard.

After draft reports from the working groups became publicly available, the public provided input on the findings and recommendations through a series of hearings, making this comprehensive report a truly collaborative undertaking.

In light of the many years it may take to restore Lahaina, short- and long-term solutions are essential to the economic and social vitality of West Maui and, by extension, the State. The work and resulting findings and recommendations of the working groups are but a small step toward a new, but never forgotten Lahaina.
Working Groups

The subject matter of each working group covered a broad range of topics to ensure that critical social, environmental, and economic issues could be discussed and vetted in a timely and discerning manner.

- **The Environmental Remediation Working Group** evaluated the cleanup of ground and ocean contamination, including the timeframe and techniques utilized.

- **The Food, Water and Other Supplies Working Group** evaluated the availability and distribution of food, water, and other necessary supplies for displaced individuals and families.

- **The Jobs and Business Working Group** evaluated the Maui unemployment rate, approaches to restart business activity, and impacts to tourism statewide.

- **The Schools Working Group** evaluated strategies utilized to accommodate displaced students and staff to return to school.

- **The Shelter Working Group** evaluated the availability and creation of temporary and transitional shelters for displaced individuals and families.

- **The Wildfire Prevention Working Group** identified the causes of wildfires and preventative action that may be taken to reduce the risk of wildfires throughout the State.

The co-chairs and members of the respective working groups were as follows:

**Environmental Remediation Working Group**
- Representative Nicole E. Lowen, Co-chair
- Representative Elle Cochran, Co-chair
- Representative Bertrand Kobayashi
- Representative Scott Y. Nishimoto
- Representative Amy A. Perruso
- Representative Mahina Poepoe
- Representative Kanani Souza
- Representative Gregg Takayama

**Food, Water and Other Supplies Working Group**
- Representative Greggor Ilagan, Co-chair
- Representative Terez Amato, Co-chair
- Representative Diamond Garcia
- Representative Cedric Asuega Gates
- Representative Rose Martinez
- Representative Richard H.K. Onishi
- Representative Jackson D. Sayama
- Representative Adrian K. Tam
WORKING GROUPS

Jobs and Business Working Group

Representative Daniel Holt, Co-chair
Representative Andrew Takuya Garrett, Co-chair
Representative Terez Amato
Representative Jeanne Kapela *
Representative Trish La Chica
Representative Rachele F. Lamosao
Representative Scot Z. Matayoshi
Representative Dee Morikawa
Representative Nadine K. Nakamura
Representative Mark M. Nakashima
Representative Sean Quinlan
Representative Gene Ward

* Withdrew membership on September 29, 2023

Schools Working Group

Representative Justin H. Woodson, Co-chair
Representative Jenna Takenouchi, Co-chair
Representative Mark J. Hashem
Representative Jeanne Kapela *
Representative Sam Satoru Kong
Representative Trish La Chica
Representative Lisa Marten
Representative John M. Mizuno
Representative Elijah Pierick

* Withdrew membership on September 29, 2023

Shelter Working Group

Representative Troy N. Hashimoto, Co-chair *
Representative Luke A. Evslin, Co-chair
Representative Micah P.K. Aiu
Representative David Alcos III
Representative Della Au Belatti
Representative Cory M. Chun
Representative Sonny Ganaden
Representative Kirstin Kahaloa
Representative Lisa Kitagawa
Representative Jenna Takenouchi
Representative Adrian K. Tam
Representative Kyle T. Yamashita

* Served in this capacity until appointed to the Hawai‘i State Senate on November 9, 2023.

Wildfire Prevention Working Group

Representative Linda Ichiyama, Co-chair
Representative Darius K. Kila, Co-chair
Representative Terez Amato
Representative Cory M. Chun
Representative Sonny Ganaden
Representative Cedric Asuega Gates
Representative Natalia Hussey-Burdick
Representative Kirstin Kahaloa
Representative Lisa Marten
Representative Rose Martinez
Representative Lauren Matsumoto
Representative Amy A. Perruso
Representative Mahina Poepeoe
Representative Jackson D. Sayama
Representative David A. Tarnas
Representative Chris Todd
Background

Lahaina stands out as one of the most important locations in the State's rich history. It played a significant political role when it became the capital of the Hawaiian Kingdom under Kamehameha I and later the site where the Kingdom's first constitution was drafted. However, Lahaina also served as a microcosm for what was to come for Hawai‘i and its people. The rise of the whaling industry had a significant impact on Lahaina, as whalers, locals, and missionaries clashed. As whaling declined, the sugar cane and pineapple industry emerged as Lahaina's primary source of revenue, and immigrants from Asia and Europe were imported as laborers. Later, it was this infusion of laborers from various backgrounds that shaped Lahaina into what it became in the twentieth and twenty-first centuries – small local businesses that reflect the town's rich history and distinguished past.

Lahaina served as an economic beacon for Maui, particularly in recent years due to its contributions through the tourism industry. With its historic sites and unique collection of businesses on Front Street, Lahaina attracted millions of visitors each year, with monthly revenue for businesses in Lahaina surpassing $70 million. Although Lahaina covers a small portion of Maui, it has made significant contributions to the local economy by employing thousands of local residents. According to the University of Hawai‘i Economic Research Organization, the number of businesses in Lahaina had grown to nearly 700, making up 16 percent of all establishments on Maui. Additionally, the area supplied visitor accommodations for thousands of people each day, contributing toward county and state tax revenues.

Although Lahaina was an economic wellspring to the local economy, it has also been historically vulnerable to dry conditions due to its location on the leeward side of Maui. According to the United States Drought Monitor, Lahaina is categorized as D3, or Extreme Drought, meaning that it is vulnerable to, among other things, extreme fire danger. Unfortunately, in August 2023, severe winds coupled with drought conditions reflecting the ongoing climate crisis created a tragic setting in West Maui that resulted in the deadliest wildfire in the United States in over a century.

Just after midnight on August 8, a brushfire was reported in Upcountry Maui, which prompted the evacuation of several communities. Later throughout the day, as the powerful winds knocked down powerlines, reports of brushfires near Lahaina prompted residents to evacuate as homes and businesses became engulfed in flames. The wildfire
moved quickly throughout Lahaina, destroying nearly everything in its wake. An ashen skeleton of what was once a thriving community is all that remained. News of the destruction spread quickly through news outlets and social media, with residents and onlookers experiencing a torrent of emotions. A hoard of media coverage converged over Lahaina and brought with it a myriad of questions and scrutiny as to the cause of the disaster, while at the same time Lahaina became a global arena for prayer, compassion, disbelief, and charitable contributions.

In August 2023, KHON2 News reported that an estimated 2,170 acres burned in the Lahaina area, with the county experiencing $5.52 billion in capital exposure, or the estimated cost to rebuild the damaged areas. As of late November 2023, 100 confirmed deaths were reported as a result of the wildfire, with four people still unaccounted for. Visitor numbers dropped significantly as government officials deliberated on recovery efforts. Many of the Lahaina residents whose homes were destroyed in the wildfire were provided with temporary shelter, but many continue to face numerous challenges and uncertainties as they navigate what lies ahead for themselves and their families.

In light of the devastation and loss of life and livelihood in Lahaina, the display of generosity from local, national, and international sources served as an example of the spirit of humanitarianism – a recognition that when such a tragedy occurs in one part of the world, others are willing to assist the impacted community so that it never has to pick itself up alone. The Hawaii Tribune-Herald reported in September 2023 that hundreds of millions of dollars in private funds have been donated to help the Maui fire survivors, and volunteers served the community in various capacities to ensure that recovery efforts would help those most impacted by the wildfire.

Life in Lahaina will never be the same. Lives have been lost. Schools have been damaged or destroyed. Long-time businesses have been reduced to piles of ash and rubble. The air, water, and soil have been contaminated. All of these concerns and more will be the many challenges that the Lahaina community must face. However, it does not have to face it alone, as many hands make light work.
ENVIRONMENTAL REMEDIATION WORKING GROUP

Environmental Remediation Working Group

PURPOSE
To evaluate the cleanup of ground and ocean contamination, including the timeframe and techniques utilized, and to prepare recommendations for appropriate legislative action.

SUMMARY
According to the World Health Organization, wildfires that engulf urban areas contain more toxic chemicals than wildfires that simply consume wood and natural materials.¹ Materials burned in urban fires can include household appliances, commercial appliances, vehicles, and construction materials, which can leave behind a variety of chemicals, contaminants, and debris that can persist in the ecosystem.

To evaluate the short- and long-term risks of the wildfires to the ecosystem, community, and environment, the Environmental Remediation Working Group (Working Group) engaged in discussions with state departments, Maui County departments, and other stakeholders and subject-matter experts to determine what appropriate legislative action should be taken to aid in environmental remediation of the Lahaina area. These meetings provided crucial background information on hazardous contaminants, monitoring efforts, and the cleanup process, including status updates on, among other things, debris removal efforts, water and air quality, and impacts to harbors and marine life.

The Division of Boating and Ocean Recreation of the Department of Land and Natural Resources (DLNR) informed the Working Group that 68 vessels destroyed in the Lahaina fires deposited debris and fuel into the harbor and that approximately 280,000 gallons of fuel has been removed. Additionally, the destroyed vessels are in the process of being removed from the harbor in cooperation with the United States Coast Guard.

The DLNR’s Division of Aquatic Resources informed the Working Group that the impact zone of water contamination due to runoff, debris, and other contaminants includes the entire Lahaina coastline. Additionally, the Division of Aquatic Resources, in cooperation with the University of Hawaiʻi, Hui O Ka Wai Ola, and United States Geological Survey, is conducting nearshore coastal water quality testing and contaminant testing.

The Department of Health informed the working group of its ongoing air and water quality monitoring and sampling.

The Maui County Department of Environmental Management provided updates on the process of securing a location for temporary debris storage and removal site. The Working Group also made attempts to meet with the Maui County Departments of Water Supply and Public Works, but they were unable to find a time to meet.

The Working Group also repeatedly reached out to the United States Environmental Protection Agency (EPA) but as of December 6, 2023, had not heard back to schedule a meeting time.

The recommendations of the Working Group primarily call for additional funding resources for long-term monitoring of air and water quality, as well as support for research efforts to better understand the environmental concerns linked to urban fires.

**FINDINGS**

**Finding 1: Monitoring for Environmental Contamination**

Environmental contamination due to runoff, debris, and other hazardous materials is inevitable following an urban fire. In the case of the Maui wildfires, various state departments and organizations are conducting testing and monitoring of water and air samples to determine any immediate risks. Long-term monitoring is preferable to evaluate whether there are any long-term risks to human health and the ecosystem.

As the impact zone of water contamination due to runoff, debris, and other contaminants includes the entire Lahaina coastline, the DLNR’s Division of Aquatic Resources, in cooperation with the University of Hawai‘i, Hui O Ka Wai Ola, and United States Geological Survey, will be conducting nearshore coastal water quality testing and contaminant testing. The University of Hawai‘i has conducted testing for chemical contaminants, accumulation of contaminants in fish, and impact on coastal ecosystems to provide an early warning of certain risks and hazards that can then be addressed on land or in water, as appropriate. Hui O Ka Wai Ola has been simultaneously conducting physical and chemical water quality testing, and the United States Geological Survey has deployed instrumentation to measure contaminant intake by biological organisms. The information gathered from these sources will be analyzed on a long-term basis and compared to baseline data to inform authorities of emerging concerns and changes in water quality over time. The samples are collected and analyzed under Hawaii Department of Health standards, and the samples collected by
the University of Hawai‘i and Hui O Ka Wai Ola are funded through the Hawai‘i Emergency Management Agency for the first year following the fire.

Additionally, sediment samples and lipid-based collection samples are being collected to test for a wide range of contaminants, including ash, heavy metals, and Volatile Organic Compounds. To minimize further contamination of the nearshore reef, absorbent booming has been implemented along storm drains. However, threats to coastal waters will persist as runoff, debris removal, and rebuilding efforts will potentially release more toxic ash and contaminated sediment. There is a possibility that the reef and coastal areas will be further impacted through bioaccumulation, including issues such as long-term disease or other unknown repercussions that will become apparent in the future. Therefore, sustained long-term monitoring is recommended for at least five years following the disaster to understand the scope of the contamination.

Another issue regarding water contamination is wastewater treatment plant contamination. The Maui County Department of Environmental Management informed the Working Group that the Lahaina Water Treatment Facility was compromised due to ash and saltwater intrusion into the system. The intrusion caused complications with the biological organism treatment system, and plans are underway to locate the sources of intrusion. Maui County is receiving guidance from California water treatment plants, who have experience with ash intrusion.

There are also drinking water concerns. The Maui County Department of Water Supply has collected over 800 samples of water from areas affected by the Maui wildfires. During a fire, water systems can become depressurized, and Volatile Organic Compounds can get drawn into the water system through the main line. Areas with many homes that caught fire had the potential to become depressurized and therefore cause an unsafe water advisory. The Maui County Department of Water Supply and Hawaii Department of Health will continue sampling water from various sources to provide long-term information on water contamination.

The EPA and Hawaii Department of Health are providing air quality monitoring and testing for metals and Volatile Organic Compounds through various continuous particulate monitoring systems, including EVM environmental monitors and PurpleAir sensors. Testing done to date has found that contaminants are not at levels of concern and not hazardous to human health. The EPA is providing air quality testing under the Federal Emergency Management Agency (FEMA), so once assistance from FEMA is withdrawn, the
EPA will remove all of its provided monitoring systems. Thus, there is a need to provide funding for more monitoring systems in the long term.

Due to the wildfires on Maui, a consolidated and comprehensive plan for environmental monitoring and sampling is necessary to fully inform conditions and response actions. While individual branches or programs may conduct monitoring and sampling activities, a consolidated plan provides a complete and thorough review, exposing dependencies and nexuses between activities. Therefore, the Department of Health is in need of services to develop and execute a comprehensive environmental monitoring and sampling plan. The Department of Health is in the process of contracting with an entity to develop and execute a comprehensive environmental monitoring and sampling plan that will address characterization of environmental contamination in multiple media, including but not limited to air, ash, surface water, stormwater, wastewater, and drinking water. This contract will exceed the current funds available to the Department of Health, and additional funds will be needed to conduct and perform its core functions. The Department of Health is also making a request to FEMA to cover this cost.

Finding 2: Debris Removal and Disposal

Debris removal in Lahaina is split into two phases:

1. Removal of hazardous materials; and
2. Consolidated debris removal.

Phase 1 consists of hazardous materials dangerous to human health, animals, and the environment. The EPA will handle disposal of these materials, which include gas cylinders, pesticides, paints, oils, fertilizers, ammunition, and batteries. Phase 2 will commence upon the completion of Phase 1 and consists of removing ash and remaining debris and soil testing to ensure the area is free of any leached toxins.

The DLNR’s Land Division provided the Working Group with updates on the proposed site to be used for disposal of debris. A temporary debris storage and removal site is proposed to be located at the current Olowalu Recycling and Refuse Center. Within the site, a previous cinder quarry will be used for temporary debris storage and removal, and a separate area will be used for long-term material disposal. This location was chosen by Maui County over the current Central Maui Landfill to minimize any environmental impacts on residents. The Maui County Department of Environmental Management informed the Working Group of issues with the permitting timeline before disposal of debris may begin at Olowalu. The Hawaii Department of Health is the regulatory agency overseeing the Maui
County Department of Environmental Management and has jurisdiction over landfill permitting requirements. However, Maui County may begin operations at the Olowalu site if plans are designed and constructed under the Governor's Emergency Proclamation, which suspends the need for regulatory oversight by the Department of Health. The Working Group notes that there are issues with Department of Health recommended compliance standards if the landfill is permitted under the Emergency Proclamation. Still, representatives from Maui County stated that once the Olowalu site is approved and permitted, debris removal can begin, which will minimize much of the air and water quality concerns stemming from the ash and other contaminants still in the area.

Lastly, the Maui County Environmental Protection and Sustainability Division within the Department of Environmental Management is handling abandoned vehicle disposal and recycling. The Department stated that vehicles damaged in the fire are actually more easily recycled than undamaged vehicles. Additionally, vehicles are considered abandoned if there are no open insurance claims on the vehicle and no one has claimed it. The vehicles are treated to remove contaminants and will be shipped to the continental United States to be recycled and disposed of.

RECOMMENDATIONS
The Working Group’s recommendations highlight the need for resources for long-term initiatives, particularly for monitoring air and coastal and drinking water quality. Additional support is needed to support research efforts to better understand the environmental concerns linked to urban fires, especially as they relate to the impact on marine resources; ongoing monitoring and sampling and testing activities; and adequate staffing at the DLNR and Department of Health to conduct these activities. Finally, long-term environmental considerations should be addressed, including incorporating restoration of coastal wetland areas in Lahaina as part of the rebuilding plans and considering policy options for sustained funding for environmental protection efforts.

Recommendation 1: Funding Efforts for Long-Term Nearshore Monitoring (Department of Land and Natural Resources)
The DLNR should be funded for the following long-term nearshore monitoring efforts:

- Support regular ongoing chemical/physical coastal water quality testing and storm sampling;
- Support characterizing thousands of organic compounds (e.g., Polychlorinated Biphenols, Polycyclic Aromatic Compounds, Contaminants of Emerging Concern,
Persistent Organic Pollutants, Perfluoroalkyl and Polyfluoroalkyl Substances), fish and invertebrate contaminants, in-water and sediment contaminants, and autosamplers to measure carbonate chemistry, including instrumentation for continuous measurement of flow, salinity, depth, temperature, pH, oxygen, chlorophyll, and dissolved organic fluorescence; and

- Aquatic biologist positions to support long-term water quality monitoring and pollution source detection.

**Recommendation 2: Funding Efforts for Air and Water Quality Monitoring (Department of Health)**

The Department of Health should be funded for the following air and water quality monitoring efforts:

- A position to support additional air monitoring needs; and
- Expansion of monitoring stations in Kula and Lahaina, including equipment and maintenance.

**Recommendation 3: Coastal Wetland Restoration**

Further investigation into the feasibility of restoration of the wetland area in Lahaina that had been drained and used for development was a possible longer-term recommendation that came up repeatedly in meetings with state and county officials. Wetland restoration provides a host of benefits that add to coastal resilience, including protection from flooding and erosion, habitat restoration for native species, filtering nutrients from runoff, carbon sequestration, and providing opportunities for cultural practices and education. Post-fire, the Lahaina community has rallied around the idea of possibly bringing back the historical wetland spaces. The destruction wrought by the fires provides an opportunity for redevelopment more in line with existing knowledge that considers the need for resilience measures, climate adaptation, and environmental protection. Restoring the wetland area may be one of these opportunities.

Additionally, groundwater dependent ecosystems, like the former Moku‘ula fishpond and wetland that surrounded Moku‘ula, are historic, critical public trust resources. They provide habitats for waterbirds and wetland birds, brackish water fish and invertebrates, and wetland plants that are native to estuarine spaces. These wetland resources that were historically part of Lahaina are intertwined with water availability and land use decisions. Water continues to pool at 505 Front Street in one of the parking garages, showing that the groundwater table still emerges in the former location. In order to move forward to
consider the feasibility of wetland restoration projects, it would be important to assess the historical boundaries of the former wetland complex and to conduct vegetation, hydrologic, and land surface elevation analyses to determine where the current landscape is today. Feasibility analyses would consider if water would need to be pumped into the area, if fill needs to be removed, and how vegetation will be replanted or encouraged to grow from an existing seedbank. Community and cultural engagement around the wetland to describe the spiritual, cultural, and environmental benefits would be a critical piece to long-term success.

Recommendation 4: Ongoing/Sustainable Funding for Natural Resource Management

Community response to the Working Group draft report on environmental remediation in the wake of the Lahaina fire highlights the critical need for enhanced funding to manage the State's natural resources effectively. With the growing wildfire risk in Hawai‘i, there is a need for increased investment in conservation and restoration of native ecosystems and for invasive species control. These efforts would help to prevent future events and also increase resilience in the wake of them. A dedicated workforce is needed to help with these efforts, as well as funding for partners and for capital investments; however, these initiatives require sustained funding. One promising solution that was raised multiple times in testimony on the draft report is to implement a visitor impact fee to offset the environmental toll of tourism. This would serve as an additional revenue source for environmental protection, natural resource management, and other efforts that are part of wildfire mitigation and will reduce environmental contamination from wildfires in the long term.
Food, Water and Other Supplies Working Group

PURPOSE
To evaluate the availability and distribution of food and other necessary supplies for displaced individuals and families, and to prepare recommendations for appropriate legislative action.

SUMMARY
The Food, Water and Other Supplies Working Group (Working Group) is committed to thoroughly evaluating the current situation and preparing actionable recommendations that can better support vulnerable communities in times of crisis.

The Working Group took a trifold approach to data gathering:

1. Soliciting data from government officials and the public through correspondence and surveys;
2. Conducting site visits and interviewing government officials; and
3. Performing independent research.

Members examined the entire supply chain, from beginning to end, to identify logistical problems related to supply availability and distribution. This included researching the role of different parties in the supply chain, including governmental agencies, such as the Federal Emergency Management Agency (FEMA), Hawai‘i Emergency Management Agency (HI-EMA), Maui Emergency Management Agency, and various other federal, state, and county departments; non-governmental organizations, such as the American Red Cross, Maui Food Bank, Maui Economic Opportunity, and other local non-profits; businesses, such as grocery stores, restaurants, and transportation companies; religious organizations; and private individuals.

On September 13, 2023, the Working Group sent 20 letters formally inviting the Governor, Lieutenant Governor, state executive department heads, and Maui Mayor to share insights, data, case studies, or best practices that will assist the Working Group in crafting impactful legislative recommendations. As of December 6, 2023, the Working Group has received nine responses from the Governor, Lieutenant Governor, Comptroller, Director of Health, Chairperson of the Board of Agriculture, Director of Human Services, Director of Finance, Director of Labor and Industrial Relations, and Director of Business, Economic Development, and Tourism. The Working Group is awaiting 11 responses from the Director
of Human Resources Development, Attorney General, Chairperson of the Board of Land and Natural Resources, Director of Commerce and Consumer Affairs, Director of Public Safety, Adjutant General, Director of Taxation, Superintendent of Education, Director of Transportation, Chairperson of the Hawaiian Homes Commission, and Maui County Mayor. These responses as well as the initial request letters are available on the Working Group’s webpage.

The Working Group also conducted a public survey between October 9-29, 2023, which solicited suggestions and comments on improving disaster response. The survey was sent to various individuals involved in response efforts or directly affected by the disaster, including government officials and agencies, non-governmental organizations, and community members. Information on how the survey was conducted and the responses received may be found on the Working Group’s webpage. In addition to these survey results, the Working Group is also anticipating responses from approximately 500 community members from a needs assessment survey conducted via phone by the Department of Health.2

On September 18, 2023, the Working Group visited FEMA’s Distribution Center in Hawai‘i. The Distribution Center serves as a significant resource hub stocked with immediate response resources. The Distribution Center, which is strategically located on O‘ahu near key transportation hubs, has a wide range of essential supplies, including the "Big Six" (water, meals, blankets, cots, tarps, and plastic sheeting), soft-sided tent shelters with support package and portable toilet, infant and toddler care items (diapers, bottles, formula, etc.), durable and consumable medical equipment, joint field office kits, and generators.

On October 10, 2023, the Working Group visited the Maui Relief Storage Facility in Kaka‘ako. The Council for Native Hawaiian Advancement opened the facility, in coordination with Lieutenant Governor Sylvia Luke and the Office of Hawaiian Affairs, to receive, sort, and inventory donations collected for Maui residents impacted by the wildfires and store them until they are ready to be transported and received on Maui.3

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On November 3, 2023, Lieutenant Governor Sylvia Luke escorted Working Group members through the Upcountry Strong Distribution Site and Central Maui Distribution Site in Kahului, Maui. The Working Group learned that the distribution centers have been adaptable in the months following the Lahaina wildfire. The Upcountry Strong Distribution Site, which was moved to a county building, is smaller and more localized, whereas the larger Central Maui Distribution Site operates out of an old grocery store to process donations as well as service the community directly.

The Working Group interviewed various governmental officials, including the Department of Human Services, who provided insight on the Lahaina wildfire response.

Lastly, members gathered data by reviewing various federal and state emergency management documents, emergency proclamations, laws, and news articles, and by speaking with key stakeholders. Chapter 127A, Hawaii Revised Statutes, which governs Hawai‘i state emergency management procedures, including the delegation of powers, proclamations, and other major items, such as commodity price regulation, was reviewed in detail.

The increased likelihood of natural disasters such as the August 8, 2023, Maui wildfires mandate increased efforts in preparation. To this end, the Working Group presents its research, including findings, recommendations, and community feedback, to evaluate the availability and distribution of food, water, and other necessary supplies for displaced individuals and families, and to prepare recommendations for appropriate legislative action.

The work of the Working Group sheds light on the current state of disaster supplies availability and distribution, identifies gaps and inefficiencies in supply chains, and offers concrete solutions to address issues of critical importance. Hawai‘i can significantly enhance its supply availability and distribution system by adopting the Working Group’s recommendations, ensuring a more effective and coordinated disaster response.
FINDINGS

Finding 1: Distribution Management Plan Maintenance

A state’s Distribution Management Plan details the process for an effective and efficient distribution of critical resources to disaster survivors during a crisis. Hawai‘i currently lacks a comprehensive process for community stakeholders to provide input on the State's Distribution Management Plan. This absence can lead to inefficiencies in disaster response, potential misallocation of resources, and a lack of transparency in decision-making processes.

Purpose of the Distribution Management Plan

In 2019, program requirements for the Emergency Management Performance Grant were updated to require that recipients’ Emergency Operations Plans include a Distribution Management Plan. As the primary state agency responsible for emergency management, HI-EMA annually maintains the Hawai‘i State Distribution Management Plan. The objectives of the Hawai‘i State Distribution Management Plan are to establish and maintain an emergency distribution network to provide critical supplies to counties. To achieve these objectives, HI-EMA has developed three distribution efforts that form the foundation of the Distribution Management Plan:

1. Distribution Management (Resupply): This involves overseeing the movement of critical resources from suppliers to disaster survivors;

2. Pre-Staged Supplies: These are supplies pre-staged within the State in anticipation of disasters to bridge the gap between the catastrophic event and the opening of emergency supply lines. These supplies can include vendor-managed inventories or other storage methods; and

3. Commodity Points of Distribution (C-PODs) Operations: These operations establish centralized initial accessible points where the public can obtain life-sustaining emergency relief supplies until they are no longer needed. Generally, the counties manage C-PODs and are crucial for immediate relief. However, the Distribution Management Plan provides guidance on the process and procedures for the State to run a C-POD.

The success of the Hawai‘i State Distribution Management Plan involves coordination among FEMA, HI-EMA, county emergency management agencies, and the private sector. Each has specific roles in establishing or maintaining key areas or critical nodes, such as Ports of Debarkation and federal, state, and county staging areas.
Under the current plan, various forecast advisories and conditions for natural and man-made occurrences are utilized as the primary means for indications and warnings to begin plan implementation. Noticeably absent from the list of incident types is wildfires. Following the Lahaina wildfire and the overall rise in disaster events occurring in Hawai‘i in recent years (e.g., the COVID-19 pandemic, Kilauea eruption, and Kaua‘i flooding), consideration should be given to updating this list to include all foreseeable incident types impacting the State.

The Lahaina wildfire and its devastating impact on the community underscore the critical need for an effective and efficient Distribution Management Plan in Hawai‘i. While existing frameworks have served their purpose to some extent, there are evident gaps and areas for improvement. This chapter aims to shed light on these areas, focusing on the roles of key stakeholders in disaster relief distribution.

**Coordination and Community Response**

Although "Unified Coordination" was implemented for primary federal, state, and county government incident management activities, information regarding coordination and community response as it relates to supply distribution following the Lahaina wildfire emphasizes the need for a more comprehensive Distribution Management Plan. The Working Group recognizes that the state and county governments tried to handle the unprecedented situation in Lahaina as effectively and efficiently as possible; however, certain gaps became apparent from the stories published in an article from the *Honolulu Star-Advertiser* on August 11, 2023, titled "As the Smoke Clears, Maui Residents Pull Together." In one incident, a wife left Lahaina to purchase supplies from a different part of the island. Regrettably, due to strict roadblocks set up by the Maui Police Department, she was restricted from re-entering Lahaina, which prevented her from reuniting with her husband. By contrast, private envoys originating outside of Lahaina were able to successfully coordinate with the Maui Police Department to pass through National Guard and police checkpoints and deliver hundreds of pallets of bottled water as well as food, diapers, blankets, and clothing to Lahaina.

In the aftermath of a major disaster like the Lahaina wildfire, there needs to be a more structured plan to instruct emergency responders on addressing such predicaments. The simple task of fetching supplies should not lead to a distressing separation of a wife and husband at a crucial time. This incident accentuates the pressing need for a well-defined Distribution Management Plan. Such a plan should seamlessly integrate county initiatives,
ensuring that future protocols facilitate families obtaining supplies without unnecessary separations.

The above-referenced Honolulu Star-Advertiser article, which was written three days after the devastating Lahaina wildfire, highlights a major aspect of the Lahaina wildfire response: Community support. Private organizations and citizens exhibited commendable teamwork in the field. In the immediate aftermath of the Lahaina wildfire, before governmental emergency response became fully operational, communities across the State rallied together to provide supplies for those affected by the wildfire.4 The Maui community worked together to fill gaps in supplying and distributing food, water, and other supplies directly to Lahaina. This included private citizens loading trucks with supplies, moving supplies to boats in Kihei, and delivering supplies to point of distribution sites, sometimes using paddleboards, jet skis, and other modes of water transportation to bring supplies ashore following the closure of Lahaina Harbor. Private pilots across the State also began organizing flights to bring lifesaving supplies to Lahaina, including a shipment of insulin.

Figure 1: ARCGIS resource map presented by the Maui Fire, Flood and Disaster Relief Group via Facebook | @mauireliefgroup via Instagram

The supply distribution hubs established on Maui in the immediate aftermath of the Lahaina wildfire were island wide and run largely by community volunteers. However, the locations for distribution were limited even though there was a strong willingness of the community to help with supply chain distributions.

Information was often scarce in the immediate aftermath of the Lahaina wildfire. Most cellular and broadband services were unavailable or severely limited due to fire damage and power outages. Residents often had to rely upon other forms of communication, including radio and direct outreach. It was not until mobile hotspots were deployed two days after the wildfire that some residents were able to access the Internet.\(^5\)

Yet, locating available supplies remained a significant obstacle. It took several days to stand up state and county websites on the wildfire. For example, Maui wildfire information was not recorded by the Internet Archive on the MauiNuiStrong.info website until August 14, 2023, six days after the Lahaina wildfire.\(^6\) Ultimately, the site’s high-bandwidth usage, due in part to many unnecessary images, made it difficult for residents with limited Internet service to access the site. Instead, residents often had to rely upon community-established, low-bandwidth online data sources for supply information in the days and weeks after the wildfire.

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Figure 2: Sample of the supply and food location spreadsheets presented by the Maui Fire, Flood and Disaster Relief Group via Facebook / @mauireliefgroup via Instagram

Figure 3: Screenshot of the low bandwidth website accessible at text data rates implemented by Co-Chair Amato, which provided information to the community on various subjects, including food, water, and other supplies, in the immediate aftermath of the Maui wildfires (site is no longer updated).
Once communications improved and online government resources were established, residents pivoted toward using these resources to access key information on supply availability and distribution, including using the [MauiRecovers.org](#) website for information on whether the local water is safe to drink, cook with, or use for hygiene purposes:

![Figure 4: Maui County Department of Water Supply ARCGIS Water Advisory Area Address Locator map resource](#)

Although there are many positive aspects of a community-driven disaster response, certain issues did arise. For example, there are multiple reported incidents via social media and private conversations of some supply distribution hubs refusing food or water to people in need from other neighborhoods. Furthermore, with a disaster of this magnitude, there is a higher potential for persons to take advantage of the emergency situation for personal gain, including diverting resources away from persons in need through donation scams. The
Department of the Attorney General currently enforces Chapter 467B, Hawaii Revised Statutes, which regulates the solicitation of funds from the public and authorizes administrative and criminal penalties for illegal activities.

Overall, the proactive response from the private sector during the initial recovery phase of the Lahaina wildfire is noteworthy. An effective Distribution Management Plan should explicitly outline strategies to optimally harness private-sector contributions during emergencies.

**Other Identified Gaps**

The Lahaina wildfire also highlighted other gaps in supply distribution, including language access and animal welfare, that are not adequately addressed in the current Hawai‘i State Distribution Management Plan.

Following the wildfire, reports emerged regarding access issues for Lahaina's non-English speaking populations, particularly its Filipino residents. In Hawai‘i, Filipinos represent the second-largest ethnic group in State, accounting for approximately one-fourth of the State’s 1.4 million residents. Of the nearly 48,000 Maui residents that can trace their roots back to the Philippines, about 5,000 of them lived in Lahaina, which accounted for approximately 40% of the town’s population before the fire.

Despite the large representation of Filipino residents in Lahaina, many reported difficulties in obtaining information and aid and, by extension, supplies due to language access issues. According to the United States Census Bureau, roughly 59% of Filipinos in Hawai‘i speak a language other than English at home. During and immediately after the wildfire, most, if not all, information was provided exclusively in English with the exception of Co-Chair Amato’s website, which included information for people in 13 languages. The language access issues that occurred with the Lahaina wildfire underscores the importance of an effective Distribution Management Plan that caters to the community’s diverse needs.

Another focus of the Lahaina wildfire response has been the animal welfare crisis. Amidst the chaos of the Lahaina wildfire, many residents were separated from their pets. The Maui

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Humane Society, the island’s only open-admission animal shelter, has been at the forefront of the Lahaina animal rescue operations. Within two weeks after the wildfire, the organization had recovered 187 animals from the burn area and treated an estimated 375 animals affected by the fires. The organization had received over 1,350 reports of lost animals and estimated that approximately 3,000 animals were initially unaccounted for due to the wildfire. At that time, approximately 30% of the recovered animals had been reunited with their families, while the remaining were being cared for by the shelter or foster families. The number of animals being rescued and cared for demonstrates the need for distribution management efforts to incorporate animal welfare considerations, such as food, water, medical, and other supplies, and highlights the significant role played by local animal welfare organizations in disaster relief.

In conclusion, the effectiveness of Hawai‘i’s disaster relief efforts hinges on a robust, transparent, and accountable Distribution Management Plan. By taking legislative action on the recommendations outlined in this report, Hawai‘i can build a more resilient state, better prepared to meet the challenges posed by natural disasters and emergencies.

Finding 2: Emergency Prescriptions Refills

During times of natural disasters or public health emergencies, there may be significant challenges that impede a patient's ability to timely receive a necessary prescription. Prescription refills play an important role in allowing patients to get their medication without frequent office visits. Refills also support patient adherence to taking medications for chronic conditions. Typical pharmacotherapy requires a patient’s adherence to the regimen to achieve the therapeutic outcome, especially in patients with chronic conditions. Abrupt cessation or unplanned interruption of therapy may lead to undesirable outcomes. For example, 12% of Hawai‘i’s population reported being diagnosed with

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diabetes in 2018.\textsuperscript{11} Patients without diabetic medications, such as insulin, can become hyperglycemic, which can cause the life-threatening condition ketoacidosis.\textsuperscript{12}

It is paramount for pharmacists to ensure that a patient’s regimen is not disrupted and medications are dispensed in a timely manner, including during emergency periods. During the COVID-19 pandemic, some providers were forced to limit office hours. Additionally, quarantine mandates forced patients to cancel existing appointments. These challenges resulted in gap periods without medications.

To ensure that patients received their prescriptions in the aftermath of the Lahaina wildfire, Governor Josh Green issued an Emergency Proclamation to allow pharmacists to refill prescriptions with up to a 30-day supply for people directly affected by the wildfire emergency, even when the pharmacist was unable to obtain refill authorization from the prescriber.\textsuperscript{13} With the increase in disasters occurring in Hawai‘i every year, there should be a permanent, self-executing authorization for pharmacists to refill prescriptions during declared states of emergency or local states of emergency.

\textbf{Finding 3: Emergency Surge Personnel}

Following a disaster, certain governmental agencies may be required to perform various emergency functions in addition to normal core functions. Emergency personnel surge capabilities are needed to assist in governmental emergency response, particularly when agencies are understaffed or the emergency is so widespread that it greatly surpasses an agency’s ability to timely respond.

The ability of certain state departments to promptly respond to assistance needs in emergency situations impacts individuals’ and families’ ability to obtain food, water, and


other supplies. The Department of Human Services plays a key role in preparedness for, response to, and recovery from natural disasters, including supporting vulnerable families, children, individuals, and communities. This includes multiple response aspects related to supplies, such as coordinating signups for assistance programs like the Supplemental Nutrition Assistance Program (SNAP), Disaster Supplemental Nutrition Assistance Program (D-SNAP), Temporary Assistance for Needy Families, and Temporary Assistance for Other Needy Families, and managing non-governmental subcontractors and volunteer programs. Currently, the Department of Human Services is 30% understaffed. Following the Lahaina wildfire, the Department was stretched to perform all normal core functions along with its emergency functions.

The Department of Labor and Industrial Relations also experiences surges during emergency periods, particularly those that involve economic upheaval and mass unemployment, such as occurred during the COVID-19 pandemic and Lahaina wildfire.

The federal Intergovernmental Personnel Act authorizes surge personnel to be borrowed from other departments if they are cross-trained. This model could be examined for potential implementation in Hawai‘i. State agencies should be queried to see if state employees can be cross-trained for temporary surge capacity. Although approximately three-fourths of the Maui unemployment claims are not currently processed, the Director of Labor and Industrial Relations is not interested in cross training employees for surge capacity. The Director of Human Services, however, is interested. Further discussions, evaluation, and investigation including Working Group co-chairs and agencies in conjunction with the executive branch are in order.

Hawai‘i’s emergency management chapter currently authorizes the Administrator of HI-EMA to establish an Emergency Management Reserve Corps composed of trained specialists to support state and county emergency, disaster, or day-to-day requirements. Establishing a standing volunteer "Emergency Response Corps" or "Surge Capacity Force" during non-crisis conditions and maintaining readiness through intermittent training would allow fast deployment in the aftermath of a catastrophic event to help support response and recovery efforts.

The Working Group’s survey asked respondents two questions involving the provision of additional state emergency response personnel:

14 Chapter 127A-6, Hawaii Revised Statutes.
• Do you support funding of a new team of dedicated State agency personnel (e.g. DHS, DLIR, DOH or others) for immediate post-disaster deployment?

• Do you support an emergency personnel surge capability to improve disaster response including voluntary paid cross training of State Employees or an Emergency Response Corp (ERC) or related ideas?

Respondents responded favorably to both suggestions:
Finding 4: Food Bank Reserves

Food banks have filled a critical need during disaster situations, including Hurricane Iniki, COVID-19, and the Lahaina wildfire.

Under the Hawai‘i State Distribution Management Plan, there is a four-day "gap" in state to county support post incident. Although HI-EMA's preferred method for addressing this gap is for residents to stock emergency preparedness kits with enough food and water for at least 14 days, only a small portion of the State actually follows this guidance.15 Best practices for emergency preparedness may be found on the following HI-EMA webpages: Prepare Your Family and Preparedness Information. Some individuals and families may need to prepare emergency kits that address specific needs such as those related to infants and toddlers, pets, and medication. Persons with excess supplies are encouraged to donate those supplies to individuals or organizations in need.

According to personnel interviews, FEMA is typically prepared to provide two weeks of food. However, with large-scale disaster events such as the Lahaina wildfire that displace individuals and families for long periods of time, additional food is needed beyond this two-week period.

Local food banks, including pet food banks, serve a critical purpose in providing food assistance and emergency supplies following disaster events. Food bank reserves were already low before the Lahaina wildfire and are further depleted now. The Hawai‘i Foodbank generally has about three weeks of food on hand at any given time. At their regular pace of distribution, this usually amounts to somewhere between 1-1.5 million pounds of food, serving an average of 127,000 people per month. However, if a major disaster were to strike O‘ahu and the number of people who were in need of food assistance rose dramatically, that food supply would only last a few days at most. The Hawai‘i Foodbank is working now to determine what ideal food stores might look like (to complement the FEMA reserves on island, and also to understand where food is from the commercial sector at any given point, such as between retail stores, distribution warehouses, and in transit on the water) so that it can support the broader community in a major disaster and if supply chains are significantly disrupted. Ideally, the Hawai‘i

15 Ladao, Mark. “Most in Hawaii Not Prepared for Natural Disaster, Study Finds.” Hawaii Tribune-Herald, 18 July 2023, https://www.hawaiitribune-herald.com/2023/07/18/hawaii-news/most-in-hawaii-not-prepared-for-natural-disaster-study-finds (56% of households surveyed believe they have enough supplies for a natural disaster; however, only 12% at least 14-days of emergency supplies.).
Foodbank would have three to four times its current capacity on hand at any given time, but that might change as it works to refine its numbers.

The major issues hindering the Hawai‘i Foodbank are storage capacity and funding. The Hawai‘i Foodbank's current warehouses on O‘ahu and Kaua‘i are maxed out in terms of storage capacity, and the O‘ahu facility is also impacted by the tides (the road is covered with water every time the tide goes above 1.6 feet). There is a plan to build a new facility with significantly expanded storage capacity, and the Hawai‘i Foodbank is also looking at ways to store food in more vulnerable communities that are at risk of being cut off in a natural disaster. From a funding standpoint, the Hawai‘i Foodbank is constantly working to raise funds, both to support its ongoing operations, including storage and employee labor, and also to ensure that it has sufficient safe and healthy food to distribute to those in need in the community. The Hawai‘i Foodbank is seeing more people seeking food assistance, many for the first time, and the cost of food is also rising—making it more difficult to meet the current needs, let alone build up enough reserves to be prepared for a major disaster.

The Hawai‘i Foodbank needs to be ready in case of a government shutdown in the future, which could significantly strain its capacity.

Most states and cities or counties fund their food banks. Hawai‘i is an outlier in that the Hawai‘i food banks receive no regular operational or food purchase funding outside of the grant-in-aid process. As COVID-era federal funding disappears and disaster-related philanthropy fades, the Hawai‘i Foodbank is concerned that it will no longer be able to meet the needs of the community without some other means of support.

Regular funding (potentially financial support as well expanded storage capacity) would help to ensure that the Hawai‘i Foodbank is able to meet the daily food needs of all in Hawai‘i, as well as increase its resiliency from an emergency preparedness standpoint.

The Working Group’s survey asked respondents whether they support increasing foodbank reserves for disaster readiness and pre-authorizing a limited emergency funding reserve to enable foodbanks to purchase replacement food without delay in the event of a declared disaster. A clear majority supported the proposal:
Finding 5: Hot Food Donations Standards Outreach

Hot food donations are a critical resource for evacuees following a disaster event. Even though Hawai‘i imports the majority of its food supply, which results in higher food prices, a significant portion of food in the State ultimately goes to waste.\textsuperscript{16} To encourage the donation of food that would otherwise go to waste, Hawai‘i protects good-faith food donors from civil and criminal liability.\textsuperscript{17} This protection extends to prepared food, such as hot foods, which are especially needed after disasters events like the Lahaina wildfire when individuals and families are evacuated to shelters where they cannot store food and lack access to cooking facilities.\textsuperscript{18}

In 2019, the Department of Health developed guidance for safe food donations by permit holders. This guidance includes standards for the donation of ready-to-eat, temperature-controlled hot foods to protect potentially vulnerable populations from a food-borne illness outbreak. It is important that food establishments are regularly made aware of these hot food donation standards, particularly during emergency periods when hot foods are urgently needed.

\textsuperscript{16} Smallwood, Bianca. “In Hawaii, We Waste More Than a Fourth of All Our Food.” Honolulu Civil Beat, 3 May 2016, \url{https://www.civilbeat.org/2016/05/food-in-hawaii-how-much-are-we-wasting}.

\textsuperscript{17} Chapter 145D, Hawaii Revised Statutes.

Finding 6: "Right to Garden" Law

Continued economic stress persists after a disaster, requiring funding for food support (e.g., SNAP, D-SNAP).

As a geographically isolated state with a limited local food supply and reliance upon imports, Hawai‘i is particularly susceptible to food insecurity following a disaster event. Hawai‘i spends up to $3 billion a year importing more than 80% of its food. Any disaster event affecting the operability of the State’s main seaport, the Port of Honolulu, has the potential to disrupt or even cut off food resupply across the State, including most FEMA resupplies.

Individuals and families also rely upon food assistance programs, such as SNAP and D-SNAP, after a disaster event due to the loss of their homes and employment. However, these programs take time to implement in disaster areas, resulting in food insecurity in the days following the disaster.19

Home gardens would substantially strengthen Hawai‘i’s food security,20 yet the right to garden is not guaranteed under Hawai‘i state law. At least two other states, Illinois and Florida, have enacted "right to garden" laws, and Maine amended its constitution to establish a "right to food," which protects an individual’s right to grow and consume their own food.21

The Working Group’s survey asked respondents whether they support a 'right to garden ordinance' that gives both economic and food resiliency benefits allowing vegetable gardens on residential properties and prohibits regulating such gardens (known in 1940s as victory gardens). An overwhelming majority, 91.6% of respondents, answered in the affirmative:

19 “USDA Announces Approval of D-SNAP for Hawaii Disaster Areas.” United States Department of Agriculture, 14 Sept. 2023, https://www.usda.gov/media/press-releases/2023/09/14/usda-announces-approval-d-snap-hawaii-disaster-areas (applications were accepted beginning September 18, 2023, 10 days after the Lahaina wildfire).
RECOMMENDATIONS
The Working Group offers the following legislative recommendations as a roadmap for enhancing the availability and distribution of food and other necessary supplies for displaced individuals and families. These recommendations are not merely theoretical but are designed to be actionable, with the potential to be converted into bills or resolutions for legislative action, and are listed alphabetically rather than in any order of priority.

Recommendation 1: Distribution Management Plan Maintenance
The State should establish a comprehensive Distribution Management Plan that encompasses all disasters and topics, including but not limited to language access and pet supplies. The plan should also ensure that HI-EMA and the counties have a coordinated plan. This recommendation can be implemented either by mandating the establishment of a comprehensive Distribution Management Plan under state law or by establishing a framework for the plan to be reviewed and approved by an advisory board. Each method has its advantages and disadvantages. The benefit of mandating the comprehensive Distribution Management Plan under state law is that HI-EMA would take full responsibility for the plan, eliminating the need for meetings or collaboration with advisory board members, and ensure that the plan is maintained in the event a plan is no longer required under federal law. On the other hand, the advantage of an advisory board is the opportunity for feedback and representation from across the State. Engaging these members would lead to a more detailed and inclusive Distribution Management Plan. The advisory board would consist of seven members, with one member to be appointed by each
of the following: the Governor, President of the Senate, Speaker of the House of Representatives, and mayors of the individual counties.

**Recommendation 2: Emergency Prescription Refills**

The State should enact a law to allow pharmacists to provide medication to patients without interruption during emergencies. We suggest converting the current pharmacy and medication authorization issued under the Governor’s Emergency Proclamation into a statute. In emergencies, this would enable pharmacies to refill prescriptions without a doctor’s authorization, ensuring uninterrupted medication access for patients.

**Recommendation 3: Emergency Surge Personnel**

The State should implement and facilitate programs and initiatives to provide personnel support for disaster response. This can include cross-training state employees for temporary surge deployments for critical services, funding new positions within departments that provide critical services, creating a mechanism to surge staffing when needed, and deploying volunteer state employees to support response and recovery efforts.

**Recommendation 4: Food Bank Reserves**

The State should set aside funding to ensure that food banks have adequate storage capacity, labor, and food reserves for their normal and emergency operations.

**Recommendation 5: Hot Food Donation Standards Outreach**

The Department of Health should conduct outreach after disasters to ensure that food establishments understand the standards for safely donating hot foods.

**Recommendation 6: "Right to Garden" Law**

The State should enact a "right to garden" law that protects individuals’ right to grow food at their residence.
Jobs and Business Working Group

PURPOSE
To evaluate the Maui unemployment rate and the approaches to restart business activity as well as the impacts to tourism statewide, and to prepare recommendations for appropriate legislative action.

SUMMARY
The Jobs and Business Working Group (Working Group) primarily gathered data through correspondence and questionnaires transmitted to and interviews conducted with government officials, leaders of non-governmental organizations, and union and business leaders. Inquiries centered on the Working Group’s three areas of focus: (1) unemployment; (2) restarting business activity; and (3) impacts to tourism statewide. Members examined the state of employment in Maui, the state of the unemployment insurance system in the aftermath of a natural disaster, efforts to stabilize businesses and employees, workforce development initiatives to prepare residents to fill anticipated labor needs, and the state of tourism.

Questionnaires were transmitted to, and interviews were conducted with, the Department of Business, Economic Development & Tourism; Department of Labor and Industrial Relations; Hawai‘i Tourism Authority; University of Hawai‘i System, specifically the Economic Research Organization and Maui College; Council for Native Hawaiian Advancement; and Hawaii Regional Council of Carpenters.

On October 26, 2023, the Working Group connected with several business organizations (including the Maui Chamber of Commerce, LahainaTown Action Committee, West Maui Taxpayers Association, and Maui Hotel & Lodging Association), business leaders, and small business entrepreneurs to hear their stories and experiences with navigating the various government programs whose purposes have been to support businesses, such as the United States Small Business Administration’s disaster loans programs.

On November 21, 2023, the Working Group held a public meeting to gather public input on its draft report published on November 1, 2023.

These efforts yielded great insights that have allowed the Jobs and Business Working Group to identify achievements and opportunities in the state unemployment insurance system and initiatives to support rebuilding businesses and preparing the Hawai‘i workforce for
anticipated labor needs. Specifically, the Working Group proposes recommendations on the following topics regarding the Working Group’s three areas of focus:

1. Unemployment Insurance Division and System strengthening;
2. Workforce development initiatives in construction;
3. Child care services availability;
4. Business assistance due to extraordinary circumstances; and
5. Responsible, respectful, and compassionate tourism.

FINDINGS

Finding 1. Unemployment Insurance Division and System Strengthening

The surge in unemployment claims due to the Maui wildfires has overtaxed the Department of Labor and Industrial Relations’ Unemployment Insurance Division staff and systems.

Impact of the Wildfires on Employment in Maui

The impact of the wildfires on Maui businesses and, by extension, employees can be categorized into three tiers. First, the wildfires either catastrophically destroyed or partially damaged the physical structure of the business. More than 2,200 structures were destroyed or damaged, of which 1,000 were visitor accommodations.22 There were 834 businesses within the disaster area that were closed,23 which employed about 7,000 persons.24 The total estimated value of the commercial or industrial structures lost is $262 million, while the total estimated value of the tourist accommodations lost is $65 million.25

Second, while some nearby businesses were spared from direct fire damage, many businesses did not have power, functioning sewer service, or safe drinking water, or any combination of these, in the weeks following the wildfires. For businesses in this second

tier, the interruption in power, sewer service, or water service has forced the business to either modify its operations or shut down entirely until service can be restored.

Lastly, in the third tier, many businesses outside of the affected areas have observed a considerable decline in revenues corresponding to the precipitous drop in tourists to Maui following the news of the wildfires.

As a result of these three tiers of impact, many businesses were forced to lay off workers. Beginning with the week of August 12 (the week of the wildfires), the Department of Labor and Industrial Relations received a wave of initial unemployment insurance claims, which are claims that initiate a determination of eligibility to begin a claimant's benefit year (new claims) or subsequent period of unemployment (additional claims) within the benefit year.26 The unemployment rate for Maui was 2.7 percent for the second quarter of 2023.27 However, due to this wave of claims, the unemployment rate for Maui is projected to soar over 11 percent in the fourth quarter of 2023, an average of 6.5 percent for 2024, and 4.5 percent for 2025.28

Figure 1 identifies the number of initial unemployment insurance claims received by the Department of Labor and Industrial Relations for the weeks ending with the identified dates. Figure 2 identifies the duration of such unemployment insurance claims by detailing the number of weeks claimed for benefits, which are requests for weekly unemployment insurance payments, regardless of whether benefits are actually paid. For data available up to December 2, 2023, the Department of Labor and Industrial Relations received 19,468 initial unemployment insurance claims and 108,011 weeks claimed since the week of August 12.

27 UHERO Forecast for the State of Hawai’i, p.4.
28 Ibid.
Figure 1: Number of initial unemployment insurance claims received by the Department of Labor and Industrial Relations.  

Figure 2: Duration of unemployment insurance claims in Figure 1 detailing the number of weeks claimed for benefits, regardless of whether benefits are actually paid.

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Since individuals affected by the wildfires face substantial economic straits and telecommunications and transportation challenges, the Department of Labor and Industrial Relations waived the HireNet registration and work search requirements for Maui claimants, beginning with all initial unemployment insurance claims received on August 6, 2023.31 "This makes it easier for eligible unemployment insurance claimants to receive their benefits without having to certify work search requirements for weekly claims."32

Due to the wave of initial unemployment insurance claims and the easing of eligibility requirements, there has been a corresponding increase in the weekly payouts. However, the Department of Labor and Industrial Relations reported that as of November 10, 2023, the Unemployment Compensation Trust Fund balance was approximately $515 million and that there is no need for legislative aid like there was during the COVID-19 pandemic.

Despite the relaxed eligibility requirements, there are many wildfire victims who may not be eligible for state unemployment insurance benefits because they are not ready and willing to return to work due to ongoing trauma. To qualify for unemployment insurance benefits, an individual must, among other things, be able and available to work, which includes that the individual be ready and willing to accept work.33 The Department of Labor and Industrial Relations evaluates each case to determine whether an individual is still eligible for unemployment insurance benefits. However, federal Disaster Unemployment Assistance has been made available for certain individuals who are deemed to be ineligible for regular unemployment insurance benefits because they were unwilling to return to work due to trauma.34

**Federal Disaster Unemployment Assistance**

Triggered by President Joe Biden’s Presidential Disaster Declaration on August 10, 2023, Disaster Unemployment Benefits are available to "[w]orkers, business owners, and self-employed individuals in the County of Maui who became unemployed or had their work  

32 Ibid.
hours reduced or interrupted due to the wildfires that occurred on August 8, 2023 and do not qualify for regular unemployment insurance.\textsuperscript{35}

To qualify for the Disaster Unemployment Assistance benefits, one of the following conditions of unemployment must have occurred as a direct result of the disaster:

(1) The individual has had a week of unemployment following the date the major disaster began;

(2) The individual is unable to reach his/her place of employment;

(3) The individual was scheduled to start work and the job no longer exists, or the individual was unable to reach the job;

(4) The individual became the breadwinner or major support because the head of the household died as a direct result of the disaster; or

(5) The individual cannot work because of an injury caused as a direct result of the disaster.\textsuperscript{36}

To be eligible for Disaster Unemployment Assistance, qualifying individuals must generally meet the following eligibility requirements:

(1) The individual is not eligible for regular unemployment insurance;

(2) The individual is unemployed as a direct result of the disaster;

(3) The individual is able and available for work, unless injured as a direct result of the disaster;

(4) The individual filed an application for Disaster Unemployment Assistance within 30 days of the date of the public announcement of the availability of Disaster Unemployment Assistance; and

(5) The individual has not refused an offer of employment in a suitable position.\textsuperscript{37}

While the application deadline for Disaster Unemployment Assistance was initially September 25, 2023, the Department of Labor and Industrial Relations extended the


\textsuperscript{37} Ibid.
application deadline for initial claims for Disaster Unemployment Assistance until October 26, 2023.\textsuperscript{38} As of November 15, 2023, the Department of Labor and Industrial Relations has received more than 3,717 applications for Disaster Unemployment Assistance.\textsuperscript{39} Of those, the following are the dispositions of those applications:

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**Process Improvements**

The Department of Labor and Industrial Relations devised a questionnaire to assess which unemployment insurance benefits program was appropriate for the claimant based on the information provided by the claimant. This reduced the wait time for an applicant, who now would not have to apply for and be deemed ineligible from one unemployment benefits program before applying to the program appropriate for the applicant’s circumstances.

Additionally, the Department of Labor and Industrial Relations, in partnership with the United States Department of Labor and the United States Postal Service, implemented two new processes for ID proofing: (1) through the secure government website, Login.gov; or (2) in-person proofing at a United States Postal Service location.\textsuperscript{40} "These new identity verification methods will help improve fraud prevention in the unemployment insurance


\textsuperscript{39} JBUWG Working Group Draft Report before the Jobs and Business Working Group of the Hawaii House of Representatives, 32nd Leg., Interim of 2023 (testimony of Department of Labor and Industrial Relations).

program while ensuring eligible claimants receive benefits regardless of their location or ability to access technology . . . "41

**Department Struggles to Address the Rise in Unemployment Claims**

Department of Labor and Industrial Relations staff have been working seven days a week to meet the demands of the unemployment surge. Employees with more experience are reallocated to best address any bottlenecks that may occur in the process. However, the volume of claims continues to overwhelm the Department, which has several vacant positions that, if filled, would alleviate the workload divided among the staff.

Lastly, efforts to address the rise in unemployment claims are hampered by the antiquated mainframe used to process regular unemployment insurance claims. The Department is in the process of modernizing the mainframe and is currently in the Request for Proposals process for that project. As of November 2023, the award for the project has been posted, and the Department is in the process of negotiating the contract.42

**Finding 2: Workforce Development Initiatives in Construction**

The existing number of construction tradespersons in the State will not be enough to meet the anticipated demand for laborers and construction tradespersons to conduct the cleanup and reconstruction on Maui.

**Maui Construction Demand**

It is estimated that the "rebuilding cycle at its peak will require about 2,000 Maui-based construction workers over-and-above the anticipated pre-fire forecast" for needed construction workers.43 Maui construction payrolls are expected to "rise from about 4,700 workers before the fires to nearly 7,000 by 2025."44 One forecast, shown in Figure 3, projects a significant increase in total building authorizations through the end of the decade.

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41 Ibid.
43 UHERO Forecast for the State of Hawai‘i, p.7.
44 Ibid.
This anticipated demand for construction tradespersons for Maui reconstruction will be in competition with other existing or anticipated construction projects in the State, including various transportation projects (such as road maintenance projects) and federal defense projects (such as the replacement of a Pearl Harbor dry dock). It will be necessary to boost local training programs to partially, if not fully, meet this anticipated need for laborers and construction tradespersons and not further exacerbate the housing crisis with a large migration of off-island workers into Maui.

**Initiatives to Scale-Up Training**

Various organizations have begun to either expand existing offerings or erect new training opportunities. The University of Hawai‘i Maui College is expanding its apprenticeship and training programs with the goal of training hundreds of construction tradespersons, which will be in addition to the 200 already enrolled in the College’s apprenticeship program. By partnering with construction trade unions to expand the College’s offerings in apprenticeship opportunities, these new apprentices will be ready and available to work while simultaneously gaining trade education and experience.

On September 15, 2023, the Council for Native Hawaiian Advancement pivoted and expanded the Hawaiian Trades Academy at Maui Mall Village in Kahului to provide free workforce certification classes for Maui residents interested in clean-up and rebuild-related

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45 *UHERO Forecast for the State of Hawai‘i*, p.16.
46 *UHERO Forecast for the State of Hawai‘i*, p.17.
The Hawaiian Trades Academy offers the following certification courses: OSHA-10 Construction Certification, OSHA-30 Construction Certification, HAZMAT, HAZWOPER-24 Certification, and HAZWOPER-40 Certification. The Council also plans to launch additional courses in Commercial Drive License (CDL) A, CDL HAZMAT Endorsement, Forklift Safety Training, and entry-level carpentry. The Council hopes to make those courses available soon. As of November 16, 2023, more than 300 persons have graduated from their certification courses.

Lastly, the Department of Labor and Industrial Relations was awarded "$485,001 in State Apprenticeship Expansion Formula funds to expand Registered Apprenticeship programs in the state and enhance the National Apprenticeship system." The Department has encouraged construction trade unions to recruit new applicants.

These initiatives will allow unemployed workers the opportunity to be trained or certified for free or at reduced cost with the goal of "upskilling" into high-demand jobs.

**Clean Up Positions To Be Available**

On August 28, 2023, the United States Department of Labor awarded an initial $10.5 million National Dislocated Worker Grant to the State for the purposes of providing "people with temporary jobs focused on cleaning up debris and repairing damage caused by the fires, and providing humanitarian assistance to the wildfire survivors." On November 3, 2023, the Department of Labor and Industrial Relations announced the availability of 300 positions for impacted workers through the DLIR Workforce Development Division and Maui Economic Opportunity, Inc.

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Individuals who are eligible for the temporary employment opportunities were living on Maui at the onset of the disaster (Aug. 8, 2023) and include those who meet the following conditions:

1. Individuals laid off, permanently or temporarily, because of the wildfires;
2. Dislocated workers that were laid off for other reasons;
3. Long-term unemployed workers; and
4. Self-employed individuals who became unemployed or significantly underemployed as a result of the Maui wildfires.52

"The temporary jobs may last up to one year with extensions, if approved by the United States Department of Labor and include worksites in the public, private non-profit, and private sectors. Target populations include individuals with Limited English Proficiency, immigrants, homeless individuals or those with housing insecurity, migrant populations, and long-term unemployed individuals."53

The following is information provided by the Department of Labor and Industrial Relations regarding applications received with respect to these positions, current as of November 24, 2023:

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
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<tr>
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<tr>
<td>Appointments</td>
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<tr>
<td>No Response to Appointment Request</td>
<td>76</td>
</tr>
<tr>
<td>Cancelled Applications</td>
<td>42</td>
</tr>
</tbody>
</table>

**Finding 3: Child Care Services Availability**

Residents are finding it difficult to return to work with the lack of child care providers nearby.

**Stabilizing Workers' Living Circumstances**

Several child care facilities and preschools were destroyed in the wildfires, thereby creating a void in the child care services sector that prevents many workers from reentering or remaining within the workforce or requires many workers to commute long distances to

52 Ibid.
53 Ibid.
access child care providers. This sentiment has also been repeated by employers, which have identified the lack of child care as one of the key barriers to workers accepting employment.

The County of Maui is coordinating with partners on developing child care programs for displaced families.54

There are several initiatives in development to increase prekindergarten educational services availability in West Maui. The first initiative is the development of the Bezos Academy in Lahaina as part of the Kaiāulu o Kūkuʻia project.55 The year-round preschool program will offer full-day programming for 40 children, focusing on hands-on activities to teach literacy, math, sensory development, social-emotional learning, and more.56 The preschool program is free of cost, and it will provide breakfast, lunch, and take-home dinner meal services.57 The preschool program is set to open in 2025.58

The second initiative is a collaboration between the Office of the Lieutenant Governor and the Executive Office on Early Learning to install a public preschool classroom at Princess Nāhiʻenaʻena Elementary School by August 2024. As of December 8, 2023, the Office of the Lieutenant Governor was working to identify an existing classroom with the goal of renovating it to be able to properly provide prekindergarten educational services.

Lastly, the planning, design, and construction of the temporary school in Nāpili, below the Kapalua Airport, for students and staff displaced by the destruction of King Kamehameha III Elementary School continues to be fluid. As of December 8, 2023, prekindergarten educational services were not planned to be delivered at the school campus. However, the Office of the Lieutenant Governor is continually advocating for its inclusion at the school and is hopeful the opportunity is made available to deliver prekindergarten educational services there.

56 Ibid.
57 Ibid.
58 Ibid.
Finding 4: Business Assistance Due to Extraordinary Circumstances

Business owners are finding it difficult to stabilize their existing economic situations and plan for the future.

Uncertain Guidance and Other Economic Pressures

As stated previously in this chapter, there are many businesses that face uncertainty not as a result of direct fire damage but of nonfunctional utilities, including power, water service, or wastewater service. These businesses have stated that the County of Maui has not provided any timeline on the progress of restoring the affected utilities. This uncertainty has led many to lose employees who need dependable income streams.

For businesses that have suffered fire damage, it is uncertain whether the businesses will be able to rebuild in the same area, particularly for businesses that operated along the shoreline. Some business owners adamantly believe they will not be allowed to rebuild in the same area and, as a result, have decided to close their businesses.59

Additionally, several businesses are still being required to pay rent or mortgage, even if the business location is closed or has burned down.60

United States Small Business Administration Disaster Loans

Full economic recovery in West Maui will be a long, slow process, with many indicators suggesting that full recovery is not expected to occur until 2028. The forecast in Figure 5 indicates that the unemployment rate for Maui will not return to the pre-fire rate until 2028.

59 For example, see Downey, Kirstin. "Uncertainty And Delays Are Too Much for Some Lahaina Businesses, They're Calling It Quits." Honolulu Civil Beat, 16 Oct. 2023.

Figure 4: Forecast that Maui payroll employment will not return to pre-fire forecast levels until 2028.\textsuperscript{61}

Figure 5: Forecast that unemployment rate for Maui will not return to the pre-fire rate until 2028.\textsuperscript{62}

To assist in the recovery and to stabilize the economic situation for small businesses, the United States Small Business Administration offers two types of disaster loans to assist businesses that have been affected by a declared disaster: business physical disaster loans and economic injury disaster loans.

Business physical disaster loans are "[l]oans to businesses to repair or replace disaster-damaged property owned by the business, including real estate, inventories, supplies, 

\textsuperscript{61} UHERO Forecast for the State of Hawai‘i, p.5.
\textsuperscript{62} UHERO Forecast for the State of Hawai‘i, p.7.
machinery and equipment. Businesses of any size are eligible. Private, non-profit organizations such as charities, churches, private universities, etc., are also eligible."63 The interest rates and terms vary on whether the business has credit available elsewhere. If the business does not have credit available elsewhere, the business may receive a business physical disaster loan with four percent interest up to 30 years.64 If the business does have credit available elsewhere, the business may receive a business physical disaster loan with eight percent interest up to seven years.65 The loan can only be applied to uninsured or otherwise uncompensated disaster losses66 and may not be used to upgrade or expand a business, except as required by building codes.67

Economic injury disaster loans are "[w]orking capital loans to help small businesses, . . . and most private, non-profit organizations of all sizes meet their ordinary and necessary financial obligations that cannot be met as a direct result of the disaster. These loans are intended to assist through the disaster recovery period."68 Unlike the business physical disaster loan, to qualify for economic injury disaster loans, the U.S. Small Business Administration must determine that the business is unable to obtain credit elsewhere.69 Businesses that meet this qualification may receive an economic injury disaster loan with four percent interest up to 30 years.70

There is a $2 million aggregate limit for the business physical disaster loans and the economic injury disaster loans.71 Specifically, if a business qualifies for both loans, the total amount of aid from the two loans will not exceed $2 million. Additionally, applicants must have a credit history acceptable to the United States Small Business Administration and demonstrate the ability to repay the loans.72

64 Ibid.
65 Ibid.
66 Ibid.
68 "U.S. Small Business Administration: Fact Sheet."
70 "U.S. Small Business Administration: Fact Sheet."
71 Ibid.
72 Ibid.
As of October 25, 2023, the United States Small Business Administration had approved 398 business loans for $58,999,400.73 The deadline to apply for the business physical disaster loan was December 11, 2023.74 The deadline to apply for the economic injury disaster loan is May 10, 2024.75

However, the availability of these loans is not being maximized in the State. First, some businesses are hesitant to apply for these loans as they are still paying off COVID-19 disaster loans.76 Second, some businesses are being denied because they are unable to demonstrate they have the ability to repay the loan.77 In several instances, denials have been issued to businesses that have lost their physical space, equipment, and inventory and are unable to stand up another location to immediately bring in revenue.

**Maui Business Bridge Grant Program**

Lastly, the Department of Business, Economic Development, and Tourism, in conjunction with the County of Maui, Maui Economic Opportunity, Credit Unions of Maui, and Maui Economic Development Board, launched the Maui Business Bridge Grant Program on November 13, 2023, to provide assistance to businesses in Maui that have experienced the direct and indirect impacts of the wildfires.78

To be eligible for funding, business owners must meet the following criteria:

- Hold an active registration license established before August 1, 2023, with the State of Hawai‘i Department of Commerce and Consumer Affairs;
- Possess an active Hawai‘i General Excise Tax ID; and

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74 "U.S. Small Business Administration: Fact Sheet."
75 Ibid.
77 For example, see ibid.
• Provide a copy of a recent Hawai‘i General Excise Tax filing dated between August 31, 2022, and July 31, 2023, with a preference for a 2022 annual G-49 filing.\textsuperscript{79}

Grants will range from $1,000 to $20,000, with the assigned grant processing agency determined by the applicant’s gross annual income for the 2022 tax year or an extrapolation of the most recent General Excise Tax filing period for businesses established for less than one year.\textsuperscript{80}

Administration of the grants will be performed by Maui Economic Opportunity for businesses with annual revenues from $0 to $300,000 and the Maui Economic Development Board for all other businesses.\textsuperscript{81, 82}

**Finding 5: Responsible, Respectful, and Compassionate Tourism**

With visitors slowly returning to Maui, the need for responsible, respectful, and compassionate tourism is greater than ever before to ensure that visitors do not retraumatize employees.

**Slow Recovery of Tourism**

As mentioned previously in this chapter, among the 2,200 structures that were damaged or destroyed, there were "roughly 1,000 visitor accommodations that housed as many as 4,000 tourists."\textsuperscript{83} In the immediate aftermath of the wildfires, the number of visitors to Maui dropped by approximately 75 percent, representing an estimated $13,000,000 loss of visitor spending per day.\textsuperscript{84} While visitors are slowly returning to Maui, the number of visitors is not expected to reach pre-fire forecast levels until 2028. While the decline in visitors to Maui will have some spillover to other islands as visitors adjust their visits away from Maui, such spillover will be limited.\textsuperscript{85}

\textsuperscript{79} Ibid.
\textsuperscript{80} Ibid.
\textsuperscript{82} Note that the Credit Unions of Maui was originally the agency assigned to process grants for businesses with annual revenues from $300,001 to $599,999. However, the Maui Economic Development Board has since taken over as the servicing agency. Ibid.
\textsuperscript{83} UHERO Forecast for the State of Hawai‘i, p.2.
\textsuperscript{84} Ibid.
\textsuperscript{85} Ibid, p.9.
Figure 6: Illustrates the precipitous drop in the weekly visitor arrivals to Maui following the wildfires.\footnote{UHERO Forecast for the State of Hawai‘i, p.2.}

Figure 7: Represents forecasted Maui County visitor arrivals prior to and after the wildfires.\footnote{UHERO Forecast for the State of Hawai‘i, p.3.}
Figure 8: Shows the actual number of air bookings to Maui as of December 8, 2023.

Hawai‘i Tourism Authority Promotion of Responsible, Respectful, and Compassionate Tourism

Although there were conflicting messages on social media and news stories immediately following the wildfires on whether tourists should be visiting Maui, the Hawai‘i Tourism Authority launched the Maui Marketing Recovery Plan, "which is centered around the new Mālama Maui campaign and prioritizes rebuilding travel demand from the United States market to Maui in the wake of the devastating Lahaina wildfire." 

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88 Yip, Cynthia. "Local Residents, Tourism Agency Want Visitors to Know Other Parts of Maui are Open." KITV, 15 Aug. 2023.
89 "Hawai‘i Tourism Authority Board of Directors Approves $2.6 Million in Funding for Maui Marketing Recovery Plan." Hawai‘i Tourism Authority, 31 Aug. 2023. News release.
The Mālama Maui campaign focuses on educating visitors to engage in responsible, respectful, and compassionate travel to Maui. Specifically, the Hawai‘i Tourism Authority asks visitors to refrain from inquiring about a resident’s personal experience with the disaster, thereby asking the resident to relive the trauma. Additionally, the Hawai‘i Tourism Authority informs visitors that Lahaina Town remains off-limits.

This effort is closely related to and accomplishes much of the intent behind the Maui Nui Destination Management Action Plan 2021-2023, the purpose of which is to address the negative effects of overtourism with the aim to "rebuild, redefine and reset the direction of tourism" on Maui, enhance the quality of life for residents, and improve the visitor experience.

RECOMMENDATIONS
The Jobs and Business Working Group offers the following recommendations:

**Recommendation 1: Unemployment Insurance Division and System Strengthening**
To adequately address surges in unemployment claims, the Unemployment Insurance Division of the Department of Labor and Industrial Relations must be properly staffed and supported with a system to efficiently process and manage claims.

(1) The Unemployment Insurance Division is encouraged to fill the vacant positions within the Division.

(2) The Department of Labor and Industrial Relations is encouraged to work with the contractor to expedite the modernization of the Unemployment Insurance Division’s antiquated mainframe system.

**Recommendation 2: Workforce Development Initiatives**
Existing initiatives are providing the opportunities for unemployed persons with the education and training to upskill into high-demand jobs.

(1) The University of Hawai‘i Maui College should be provided with additional resources to expand the Career and Technical Education apprenticeship program for hiring adjunct faculty.

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(2) Nonprofit organizations that offer certification classes, training, and apprenticeships for living wage employment opportunities are encouraged to apply for grants-in-aid from the State during the Regular Session of 2024.

(3) The Department of Education is encouraged to promote trade career pathways in middle and high school to assist with the anticipated demands of the State's labor and construction workforce.

Recommendation 3: Child Care Services Availability
The development of child care services in West Maui should be encouraged to allow workers to return to work.

Recommendation 4: Business Assistance Due to Extraordinary Circumstances
Efforts should be made to assist businesses in these extraordinary circumstances.

(1) The United States Small Business Administration is encouraged to work with Hawai‘i’s Congressional delegation to explore options to maximize available assistance to Maui businesses.

(2) Lenders are encouraged to consider the extraordinary circumstances of the Maui wildfires to reach an amicable resolution with businesses when constructing mortgage relief and forbearance agreements.

(3) The County of Maui is encouraged to:

- Communicate firmer updates on timelines for infrastructure restoration;
- Establish a designated federal resource navigator to assist and inform persons, including small businesses, of the resources available to them; and
- Develop a process to expedite the permitting of infrastructure and buildings, especially for businesses that are still capable of operating.

Recommendation 5: Responsible, Respectful, and Compassionate Tourism
Initiatives should promote responsible, respectful, and compassionate tourism.

(1) Additional resources are encouraged for the Hawai‘i Tourism Authority to continue its Mālama Maui campaign and implementation of the Maui Nui Destination Management Action Plan.
(2) The development of a visitor mobile application should be examined, which could assist in promoting responsible, respectful, and compassionate tourism and promote areas of the State that are available and ready to accept visitors.
Schools Working Group

PURPOSE
To evaluate the strategies utilized to accommodate displaced students and staff to return to school, and to prepare recommendations for appropriate legislative action.

SUMMARY
The Schools Working Group (Working Group) found it prudent to incorporate community input at the beginning of the policy making process. After initial meetings to contemplate various topics requiring examination, the Working Group held a community listening meeting on September 28, 2023, in West Maui to hear directly from those most impacted by the wildfire, learn from their experiences, and verify that the Working Group’s focus was aligned with that of the West Maui community. The Working Group not only desired to determine whether there was consensus for proposed policy prescriptions for West Maui, but to also determine the applicability of potential systematic changes statewide. The community listening meeting in West Maui largely substantiated the Working Group’s thought process and the scope of its assignment.

Prior to evaluating the methodologies implemented to accommodate displaced students and Department of Education (DOE) employees, the Working Group determined that it is equally important to focus on whether current statewide practices are sufficient to address situations arising before or during an emergency.

Members gathered data by reviewing various federal and state emergency management documents, emergency proclamations, laws, and news articles, as well as by speaking with key stakeholders.

The Working Group examined the state of displaced students and DOE employees at schools in West Maui and the efforts to return students to those schools, identify gaps and inefficiencies in the process, and offer solutions to address these pressing issues.

FINDINGS
Finding 1: School Evacuation Plans
One of the most prominent areas of concern for the Working Group—one shared by West Maui community members—is the adequacy of evacuation plans in place and the need for such plans to be rehearsed in order to ensure preparedness should another natural or man-
made emergency occur during school operating hours. Since the September West Maui community listening meeting, other communities, such as Makakilo in West Oʻahu, have expressed similar concerns about evacuation plans for their public schools and the lack of available alternate escape routes.

As a result of the significant apprehension communicated at the Schools Working Group's West Maui community listening meeting, the Department of Transportation, in cooperation with the DOE, private landowners, and West Maui community members, developed an alternate evacuation route for the Lahaina area public schools. Per the strong request of the West Maui community, the Department of Transportation completed the project before the reopening of the Lahaina public schools. The Department of Transportation is also working on an additional emergency evacuation route in the Lahaina public schools area. This is an example of how, through collaboration, state government can be more responsive to community needs.

The Working Group recognizes that, according to the DOE Emergencies webpage, each public school statewide has an operational Emergency Action Plan in place. The DOE’s website indicates five categories of emergency drills conducted annually by each public school: evacuation, tsunami, earthquake, lockdown, and shelter-in-place. Lockdown drills simulate the possibility of an internal or external threat on campus, such as an unknown person that is perceived to be of danger on or near a DOE school campus. During this exercise, students and staff remain in classrooms behind locked doors until they are cleared to leave their secured areas. Shelter-in-place drills allow students and staff to practice sheltering from hazardous materials or extreme weather conditions. The evacuation drill prepares for dangerous conditions on the campus itself. To complement these evacuation drills, each school also has a Pre-Designated Evacuation Site location to evacuate to in case of an emergency.

Two other campus drills are required in accordance with state law: fire drills must be practiced annually in each school, and effective June 2, 2023, active shooter drills must be developed for each DOE school.

In addition to the potential issues of executing the DOE evacuation plans, the DOE also has challenges effectively communicating those plans. The Working Group received feedback

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93 Act 53, Session Laws of Hawaii 2023
that the DOE had difficulty communicating the evacuation plan with parents and students during the crisis. This led to confusion and chaos, as people did not know where to go, what to do, and who to contact in the days that followed.

**Finding 2: Learning Options for Displaced Department of Education Students**

The Working Group finds that the DOE provided various instructional choices when addressing the displaced West Maui community’s school needs. Distance learning, also referred to as online learning, was offered to families. Families were also provided an opportunity to attend public schools outside of the impacted areas. Bus service was ultimately arranged to accommodate transportation to and from these alternate school locations; however, the Working Group notes that sending West Maui families outside of the area was not largely desired by the community. For those West Maui families who did not want to send their children to public schools in Central and South Maui, learning hubs were established in West Maui. These learning hubs were not designed to deliver education fully in the traditional sense but did provide a more structured learning environment for DOE students and were operated by DOE employees. These learning hubs also provided services for students with special needs and students from Kaiapuni (Hawaiian immersion) schools. The learning hubs for special needs students were organized to more quickly get these students back into safe learning environments, and for Kaiapuni students by request of the West Maui Kaiapuni community.

There were also requests for school choice as an option, defined as the alternative to use public education funds to pay for private school tuition in West Maui; however, the Hawaii State Constitution prohibits the use of public funds for the support or benefit of any sectarian or nonsectarian private educational institution.94

The Working Group also finds in extreme situations of natural disaster designations, the DOE has the ability to assemble temporary structures to hold public school classes in existing Department sites or in alternate locations. The United States Army Corps of Engineers is currently constructing a temporary public school at the Pulelehua planned community development site in Nāpili as a long-term interim option for students and staff of King Kamehameha III Elementary School. The interim school will be a fully functional DOE public school. Completion will take 95 days to six months. The DOE has also leased and purchased flex-space classrooms akin to classroom tents, but with hardwood floors, lighting, air conditioners, and power generators. These flex-space classrooms are being

94 Section 1, Article X, Hawaii State Constitution
leveraged to increase learning space capacity at Maui Waena Intermediate School in Kahului, Central Maui, and Princess Nāhiʻenaʻena Elementary School in Lahaina, West Maui.

**Finding 3: Potential Health Hazards at School Sites and Monitoring Systems**

Short-term health hazards during a fire include exposure to heat, explosions, carbon monoxide, ozone, chemicals released from products that burned, and accidents from damaged structures or traffic during an escape.

Long-term health hazards remain from exposure to chemicals and metals adsorbed in the ash left behind if they are inhaled, ingested or touched. The chemicals and metals released from burning of manmade infrastructure and materials may include:

- Heavy metals such as lead, mercury, copper, arsenic, chromium, cadmium, magnesium, and nickel from burning buildings, cars, and other products;
- Polycyclic Aromatic Hydrocarbons from burning fossil fuels as well as plastics, roofing materials, and asphalt;
- Volatile Organic Compounds, which are emitted as gases at ambient temperatures from certain solids or liquids;
- Aldehydes, such as formaldehyde, from burning plants; and
- Asbestos from fire-retardant materials in older buildings.

Very little is known about the health effects of exposure to chemical mixtures. It is unknown whether they can have synergistic effects that amplify exposure. There is also limited data on low-level exposure over time to the contaminants, as studies focus on high short-term exposures.

Ash may become airborne in the form of small solid or liquid droplets of Particulate Matter (PM) and inhaled. PM 10 (10 microns and smaller) does not pass the bronchi and is discharged. PM 2.5 and smaller may reach the alveoli. Short term exposure to PM 2.5 can cause irritation of the eyes, throat, and lungs. Longer-term exposure can lead to the worsening of chronic respiratory diseases like asthma and chronic obstructive pulmonary disease as well as heart attacks.

Water may be contaminated due to plastic pipe degradation or backflow from loss of pressure. Volatile Organic Compounds may be sucked into pipes and can leach into pipes if they remain there for an extended period of time.
The following actions were taken to address health concerns after the Lahaina wildfire. Results of the testing are posted on DOE’s website detailing progress reports on reopening Lahaina schools.

**Soil Quality**

Because there was no visible ash observed at the three schools after the fires, the Department of Health did not recommend testing the soil at the three campuses. However, out of an abundance of caution, on September 13, 2023, the DOE hired Ford & Associates, an independent consultant, to conduct soil testing for heavy metals and dioxins at the three schools.

For the testing at Princess Nāhi‘ena‘ena Elementary School and Lahaina Intermediate School, the soil results were all within standards and are safe. For Lahainaluna High School, the results showed an isolated finding in half the samples of a slightly elevated nickel level. The Department of Health said this is not uncommon in volcanic soil across the State, and the findings were still well below the United States Environmental Protection Agency (EPA) threshold and considered safe.

**Drinking Water Quality**

The Maui County Department of Water Supply conducted water sampling from the treatment plant above Lahainaluna, which provides water to all three campuses. No destruction or fire damage to any of the properties in that water distribution area was found, and there was no recorded loss of water pressure. Subsequently, multiple rounds of further water testing have all demonstrated the absence of any fire-related contaminants in the drinking water source feeding the three schools.

Currently, drinking water quality is not a stated concern, and standard procedures will be maintained. Maui County’s Department of Water Supply and the State Department of Health conduct regular testing on water and will remain the lead agencies if conditions change. Updated information is provided by the Maui County Department of Water Supply on its website.

Flushing of all water lines was completed on October 2, 2023. This is a standard procedure when campuses are closed for an extended period, as water in the plumbing can become stagnant.
Air Quality

Baseline air sampling was conducted using specialized air monitors and air sampling. Air monitoring consists of using an AreaRae Pro Portable Monitor to measure contaminants. Air sampling involves collection of air for laboratory analysis using Summa Cannisters. The purpose of air sampling is to measure how much of a specific contaminant is present in the air over a period of time. For this response, samples were collected over time periods ranging from 12 to 24 hours and were submitted to a laboratory for analysis. Laboratory analysis was done for metals including lead and arsenic, asbestos, particulate matter, and 42 Volatile Organic Compounds.

Results showed that no metals or asbestos samples exceeded reference levels, and PM 2.5 was detected at low levels consistent with what is expected for this region of Maui under regular conditions. Three types of Volatile Organic Compounds—benzene, naphthalene, and carbon tetrachloride—were measured at levels above the EPA’s Regional Screening Levels and are commonly present in urban areas at the levels that were detected in these samples.

- **Benzene** results from burning fossil fuels. Two of eight samples in Lahaina and two of two samples in Kula were higher than the reference level for benzene; however, the levels detected are below levels expected in suburban and rural air.

- **Naphthalene** is a combustion byproduct found in the emissions of fires and cigarette smoke, as well as vehicle exhaust and industrial sources. The levels were above the reference value found at most testing sites in Lahaina and Kula are expected to diminish as the cleanup of the site continues. Levels are much lower than those known to cause acute health problems.

- **Carbon tetrachloride** is a manufactured chemical that does not occur naturally and is commonly found in air, water, and soil because of past and present releases. One sample in Lahaina and one sample in Kula were found to be above the reference level. However, the levels detected in Lahaina and Kula were below background levels expected in cities.

The following are reports of validated EPA air sampling data, as conducted by Weston-TechLaw JV, LLC:

- **Analytical Report**

- August 2023 Air Sampling Event
Air quality monitoring for PM 2.5 is ongoing and has been made publicly available. Following the wildfires, the EPA and Department of Health installed 17 continuous real-time air monitors. There are 12 PurpleAir PM 2.5 monitors in Lahaina and Upcountry Maui, as well as five Environmental Beta Attenuation Mass (E-BAM) monitors in Lahaina. E-BAMs are effective for measuring PM 2.5, having accuracy and precision consistent with EPA requirements and results comparable to EPA reference methods. The PurpleAir monitors provide additional geographical monitoring coverage within communities for possible ash and dust in the air. Real-time air monitoring data is available on the AirNow Fire and Smoke Map website through searching for “Lahaina, HI”. External sensors installed at Princess Nāhi‘ena‘ena Elementary School, Lahaina Intermediate School, and Lahainaluna High School can be viewed on PurpleAir’s website.

Handheld air sensors have been provided to each school administrator to monitor trends in PM 2.5 levels indoors.

High-efficiency particulate air filters are placed in all DOE and charter schools at risk of being impacted by certain natural disasters such as fire.

Air Quality Action Plan: Guidelines were created and made available to the public on school actions to be taken for different concentrations of PM 2.5. Air quality is always monitored, and measures to reduce exposure are ramped up as PM 2.5 concentrations increase, as documented in the Air Quality Action Plan for Schools, found in the DOE’s Health & Safety Guidance for Reopening Lahaina Schools.

Future planned ash testing will be conducted as soon as the EPA grants access to the Hawai‘i Department of Health, expected in early November. The Department of Health will sample ash from 200 spots in Lahaina and send it to the lab to test for hazards.

Finding 4: Mental Health Support Services

The DOE, in coordination with the Department of Health, offers several types of services to aid community members, families, and students dealing with mental health challenges in the wake of the Maui wildfires.

Available pre-existing DOE resources include:
School-based services for in-person mental health and well-being services available using the Hawai‘i Multi-tiered System of Support with continuum of care provided by school level staff, complex area school-based behavioral health personnel, and community partners;

- Virtual services via Hazel Health for tele-therapy sessions with licensed therapists; and
- Information on Hawai‘i CARES via phone or text to 988;

Additional support coordinated by the DOE to expand access to services includes:

- Community-based services for in-person visits at Lahaina Comprehensive Health Center, Maui Family Guidance Center in Wailuku, and a satellite clinic location set up at Kā‘anapali Beach Resort;
- Twenty-four/seven phone counseling service available to youth and families provided by HMSA and partner Carelon Behavioral Health, regardless of HMSA membership;
- Community liaisons tasked with providing ongoing outreach to students and families;
- Dedicated phone hotline and two-way texting support for students and families; and
- Staff training on providing additional student support.

The DOE advised that its Maui District staffed 133 mental health positions for all Maui County schools, including 17 school-based behavioral health staff for the Hāna-Lahainaluna-Lāna‘i-Moloka‘i Complex Area. Lahaina campuses also staff four behavioral health specialists and 11 school counselors. Ahead of re-opening in October 2023, the DOE planned to send 20 additional mental health staff to Maui County, with 12 professionals dedicated to Lahaina.

Teachers and DOE staff were also offered in-person and telehealth mental support options, including Extended Employee Assistance Program support to account for ongoing needs and healing.

While options are available, the continuing mental health provider shortage in the State, particularly on the neighbor islands, raises questions about actual access to, and connection with, a provider. The 2022 Access to Care Survey, compiled by Community First Hawaiʻi,
reported 78% of providers listed “mental health/counseling” as the most-needed medical specialty in short supply, followed by psychiatry at 73%.

At the Schools Working Group community listening meeting held in West Maui, parents voiced concerns about how the shortage of providers impacts not just accessibility to a mental health professional but also the ability of the available providers to accommodate ethnic, cultural, and social considerations to connect with youth and achieve successful healing. Given the known shortage of providers, expanding access to mental health and trauma services is a necessity to ensure student wellbeing.

**Finding 5: Traffic Impacts in Reassigning Displaced Students and Staff**

King Kamehameha III Elementary School was lost to the Lahaina wildfire. Students and staff of the elementary school will temporarily hold school instruction at Princess Nāhi‘ena‘ena Elementary School in Lahaina. All three remaining Lahaina public schools are located in the same geographic area off of Lahainaluna Road. Siting all West Maui public schools in the same geographic location has raised concerns among community members about the increase in vehicular traffic congestion.

**Finding 6: Student Promotion and Graduation Timelines**

Section 302A-251, Hawaii Revised Statutes, mandates that DOE elementary and secondary schools have 180 instructional days that include 1,080 student hours. However, the statute also provides that the Board of Education may grant a waiver to any individual school and should adopt policies and procedures to do so.95

Pursuant to Board of Education policy, students also have minimum course and credit requirements to receive a high school diploma. Some students might be unable to complete or pass particular required courses due to school disruption.

**Finding 7: Displaced Students Faced Disruption and Challenges in School Athletics Programs**

The Hawaii High School Athletic Association does not have guidelines within its governing documents or administrative rules on how to handle athletes that switch schools in unplanned ways due to disasters. The default rules require student-athletes to be enrolled by certain deadlines and to sit out at least one year before playing the same sport at a new school.

The restrictions are waived for students who are moving into the State, moving between islands, and moving from a public to a private school. The federal McKinney-Vento Act also

95 Section 302A-251, Hawaii Revised Statutes
requires states and local educational agencies to eliminate barriers related to housing and location to ensure that students experiencing homelessness who meet eligibility criteria, such as academic and skill levels, can participate fully in athletic and other extracurricular activities.

“Disaster rules” by the local leagues are made only after a disaster is officially designated. In the case of the Puna volcanic eruption, maximum flexibility was given for student-athletes. In the case of the Lahaina wildfire, the Maui Interscholastic League determined that students could not switch schools mid-season and that they should not join a team at the school they found themselves at if they wanted to keep the option open to play with Lahainaluna High School, should it reopen. At least one Lahainaluna High School student had joined a team at King Kekaulike High School and wanted to switch to the Lahainaluna High School team once the student was notified of being able to return to Lahainaluna High School when it reopened. However, because the student did not receive an exemption prior to the start of the season, the student was initially unable to play for either school. Only after the student was deemed ineligible to play for either school, did the Maui Interscholastic League grant the student the opportunity to rejoin the team at Lahainaluna High School. It is unclear if other Lahainaluna High School student-athletes would have made different choices if provided more clarity about the rules from the Maui Interscholastic League.

Finding 8: Federal Hazard Mitigation Funding Opportunities for Schools

The Federal Emergency Management Agency (FEMA) offers a variety of hazard mitigation funding opportunities that can be used to reduce or eliminate the long-term risk to people and property from future disasters. These funding opportunities are available to counties, state departments, and certain private non-profit organizations. Examples of eligible projects include:

- Developing hazard mitigation plans;
- Retrofitting existing structures to make them more resilient against wind and flooding; and
- Installing generators or microgrids.

For schools, the Hazard Mitigation Grant Program is the most relevant funding opportunity. The Hazard Mitigation Grant Program provides funding for a variety of projects that can help schools reduce their risk from natural disasters, such as hurricanes, tornadoes, floods,
and wildfires. Examples of eligible Hazard Mitigation Grant Program projects for schools include:

- Reinforcing school buildings to make them more resistant to wind and earthquakes;
- Elevating school buildings to reduce the risk of flooding;
- Installing backup generators to ensure that schools can operate during power outages; and
- Creating safe rooms where students and staff can shelter during storms.

Other FEMA hazard mitigation funding opportunities that may be relevant to schools include:

- Hazard Mitigation Grant Program Post Fire, which provides funding to help communities recover from wildfires and reduce the risk of future wildfires;
- Building Resilient Infrastructure and Communities, which is designed to support communities in developing and implementing long-term hazard mitigation strategies; and
- Flood Mitigation Assistance, which is designed to support communities in developing and implementing long-term flood mitigation strategies and reduce their risk from flooding.

**Finding 9: Building and Rebuilding Resilient Schools**

Upon review of current school campuses, the Working Group finds that a number of components leave facilities vulnerable to fire. Many school buildings in Hawai‘i are surrounded by landscaping that consists of highly flammable vegetation, which increases the risk of fires spreading quickly to school buildings during wildfire events. Additionally, a significant number of school buildings in Hawai‘i lack modern fire suppression systems, such as automatic fire sprinklers and fire alarms, leaving them vulnerable in the event of a fire. Fire suppression systems, when properly installed and maintained, can effectively control and extinguish fires and reduce property damage and risk to students and staff during fires. Many school buildings statewide also lack fire-resistant materials and construction practices, leaving them susceptible to rapid fire spread. The fire resilience of Hawai‘i’s school buildings and environments must be improved to better protect students, staff, and valuable educational infrastructure from the threat of fires.
Finding 10:  Funding Support for Schools

FEMA has tasked the United States Army Corps of Engineers with designing and overseeing the installation of a temporary school campus for the Lahaina community. The temporary school will serve as an interim solution after the loss of King Kamehameha III Elementary School and will be able to accommodate up to 600 students. The estimated cost for the school construction has not yet been determined. The percentage of the State’s share of the cost will be affected by the amount of insurance proceeds the State receives for the destroyed facility but, according to the Hawai‘i Emergency Management Agency (HI-EMA), would be a maximum of 10%.

In addition, HI-EMA is currently getting capital improvement project funds, of approximately $1 million to $3 million, for the Hawai‘i State Shelter Retrofit Program. This program, administered by HI-EMA, provides funding to retrofit existing structures to make them more suitable for use as emergency shelters and is designed to increase the number and improve the quality of available emergency shelters in Hawai‘i. The program targets existing structures, such as schools, churches, and community centers, that can be retrofitted to meet the needs of emergency shelters.

Under the program, retrofitting activities that may be funded include:

- Strengthening roofs and walls to withstand high winds;
- Installing hurricane shutters and impact-resistant windows;
- Elevating structures to reduce the risk of flooding;
- Installing generators and other backup power sources; and
- Creating safe rooms where people can shelter during storms.

RECOMMENDATIONS

Recommendation 1: Grant Public Access to Certain Evacuation Plans and Expand Campus Drill Plans

The DOE and Department of Transportation should assess all DOE school campuses to determine if there are sufficient emergency evacuation routes statewide. Furthermore, Emergency Action Plans for individual schools are not accessible to the public or state policymakers. The Schools Working Group strongly recommends granting public access to Emergency Action Plans that do not pose a security risk to students, staff, or guests visiting
school campuses so that communities have an opportunity to assess whether these emergency plans are adequate for student and staff safety and operational readiness.

Each DOE school should have a comprehensive evacuation communication plan in place for evacuations and other emergencies to help keep parents, guardians, students, and staff safe in the event of a wildfire or other emergency situation. The school evacuation communication plan should include the following components:

- **Identify key stakeholders and communication channels**: This includes parents, students, staff, and emergency responders. The plan should identify how the school will communicate with each group before, during, and after an evacuation or other emergency situation.

- **Develop a communication protocol**: This includes establishing clear and concise messages and identifying who is responsible for communicating each message. The plan should also include a process for updating the communication protocol as needed.

- **Test the communication plan regularly**: A report from the DOE to the Schools Working Group found that it required significant effort to reach the entire student population. Testing and rehearsing the communication plan, similar to a drill, will help to ensure that the plan is effective and that all involved know their roles and responsibilities.

- **Use multiple communication channels**: This includes using social media, email, text messaging, and phone calls. The plan should also identify alternative communication methods in case of power outages or other disruptions.

- **Be culturally responsive**: The plan should be translated into multiple languages and should be accessible to students and individuals with disabilities. The DOE should also work with language access experts to support schools in the development of the plans.

- **Involve the community**: The plan should be developed with input from students, parents, guardians, staff, and emergency responders. This will help to ensure that the plan meets the needs of the community.

The school evacuation communication plan should be shared with all students, parents, guardians, and staff at the beginning of the school year through posting on the school’s website and social media pages and sending a copy home to parents and guardians. Schools should collect and maintain up-to-date contact information for all students,
parents, and guardians. This information should be collected at the beginning of the school year when the plan is distributed to students, parents, and guardians and updated as needed, sending a reminder each year for parents and guardians to update their contact information.

Recommendation 2: Ready Alternate Learning Options and Student Support for Displaced Students

The DOE should create a process to quickly hire or reposition DOE personnel to better accommodate distance learning and learning alternatives so that all learning options are made available to families sooner. DOE schools should keep the DOE apprised of underutilized classroom space that could be used by displaced students and staff when necessary. This will assist a more rapid response to better support displaced students and staff.

The DOE should monitor student progress throughout the school year to see if the disruption caused by the wildfire or any other disruption caused by manmade or natural disasters puts some students at risk of failing to progress. If the Department finds that there is a need to assist students in this regard, the Department should take the appropriate steps to ensure that sufficient resources are in place to offer additional instructional hours or support during or after school hours or to offer requisite courses or support through summer school or other school break opportunities.

Recommendation 3: Monitor Potential Health Risks

The DOE and Department of Health have collaborated closely and effectively to test for contaminants and provide a safe environment for reopening. However, establishing a protocol for all future disasters would make it faster and more efficient for both departments to administer testing, monitor potential health risks, and timely communicate plans and actions.

- **Create a universal checklist to clear all schools for re-opening or remaining open following a disaster.** The Department of Health and DOE can work together to make a comprehensive universal checklist that sets conditions to be met in order to clear a school for reopening following a disaster. The checklist should include any acceptable alternatives to meeting a condition during a disaster. Examples include portable latrines in place of a functional wastewater connection, or drinking water brought in instead of potable piped water. The checklist should include but not be limited to: Potable water, clean air, human waste management, food safety, hygienic facilities, safe soil for walking, power,
internet, absence of exposed physical hazards, and management of standing water in case of floods. The status of each checklist item should be publicly available on the DOE’s website as efforts progress.

- **Make all testing data and all future testing plans publicly available on the Department of Education's website as they become available.** Parents and community members want to see the results and assess the entities conducting the tests. Complete transparency will prevent misinformation from spreading. If the public is aware of testing planned in the future, this may alleviate their concerns and demands for more testing.

- **Minimize ash contamination to schools from clean up in Lahaina.** In the case of the Lahaina wildfire, the United States Army Corps of Engineers and DOE should communicate before removal of ash commences to discuss strategies to minimize downwind contamination of schools. Strategies to minimize downwind contamination may include physical barriers around cleanup sites, use of misters or sprayed water, changing location of work depending on the predictable morning and afternoon wind patterns, and commencing clean up far from the schools while monitoring air for contamination downwind to assess whether further measures are needed before working upwind of the schools.

**Recommendation 4: Increase Mental Health Care Access**

The Legislature needs to continue ongoing efforts, such as creating incentivizes for local providers to stay in or return to the State, expanding pipelines to train professionals, and improving access to mental health care providers, to expand the number of mental health care professionals within the State to adequately serve students in times of crisis.

**Recommendation 5: Traffic Mitigation for West Maui**

The DOE should monitor traffic congestion in the immediate vicinity of the Lahaina schools area and mitigate increased ingress and egress to the West Maui Lahainaluna Road. The Working Group finds that the following solutions have proven effective across the State and may also help with traffic mitigation on Lahainaluna Road:

- Using Maui Police Department Traffic Guards to control traffic flow; and
- Implementing staggered school start times to reduce vehicular traffic.

Staggered school start times have been primarily used for public schools with large student populations in Central and West Oʻahu public schools. In multiple scenarios, the positive correlation between the increased number of students and increased traffic congestion
holds true. Therefore, the Working Group finds varied start times to be one viable option to solving traffic congestion.

It is also important to note that if there are proposed changes to school start times, the proposed start times may be outside of the existing collective bargaining agreements between the DOE and the exclusive representatives of the applicable collective bargaining units. Therefore, changes to school start times may need to be agreed upon by all relevant parties.

**Recommendation 6: Student Athletics Consideration**

The Schools Working Group recommends that the Hawaii High School Athletics Association craft rules or guidelines to give student-athletes complete flexibility over participation as they move between one or more schools as a response to a disaster, whether due to changes in school options or changes in their living situation. The Working Group also recommends that the Hawaii High School Athletics Association create a process for impacted member leagues of the Association to petition for adjustment of those rules or guidelines as needed for specific situations.

**Recommendation 7: Building Resilient Schools**

To improve safety and modernization of Hawai`i's public school facilities, the Working Group recommends the following:

1. The Department of Accounting and General Services, DOE, School Facilities Authority, and counties should develop and enforce regulations and guidelines for fire-resistant landscaping around school buildings. This would include encouraging the use of fire-resistant plant species and establishing defensible zones by creating a buffer of non-combustible materials, like gravel or concrete walkways, between vegetation and school structures. Regular maintenance of these landscapes to remove dead vegetation and reduce fire fuel is essential.

2. The Department of Accounting and General Services, DOE, and School Facilities Authority should retrofit older school buildings with fire suppression systems and ensure that all new school construction projects incorporate these systems.

3. The Department of Accounting and General Services, DOE, and School Facilities Authority should retrofit older school buildings to improve their fire resistance by upgrading materials and adding fire barriers. Regular
inspections and maintenance should be carried out to ensure that these fire-resistant materials remain effective.

(4) The counties and State Fire Council should enforce building codes that require the use of fire-resistant materials in the construction and renovation of school buildings. This includes fire-rated walls, doors, windows, roofing materials, and insulation.

Recommendation 8: Maximizing Use of Federal Funds

The DOE should carefully review the eligibility requirements of federal programs to determine which programs are the best fit for the Department’s needs. The Department should also consider applying for FEMA hazard mitigation funding to help schools make necessary investments to reduce their risk from natural disasters and protect the safety of their students and staff in the event of a future disaster.

The Legislature should also consider appropriating state funds to help extend or supplement federal disaster assistance that may expire.
Shelter Working Group

PURPOSE
To evaluate the availability and creation of temporary and transitional shelters for displaced individuals and families, and to prepare recommendations for appropriate legislative action.

SUMMARY
The wildfires that tore through Maui in August 2023 were among the deadliest in the history of the United States and the worst natural disaster in the history of Hawai‘i, and are currently the State's largest humanitarian crisis. As a result of the wildfires, there are currently 100 confirmed deaths, four missing person investigations, and 11,000 displaced individuals. The fire damaged 3,631 properties, 60% of which were rental housing. The loss of these residential units comes on top of an existing housing crisis in Hawai‘i, as housing prices in the State are the highest in the nation, at 2.7 times the national average.

Given the extreme cost of housing in Hawai‘i, dearth of existing available long-term rental units, onerous building regulations, loss of housing stock on Maui, and sheer number of displaced families that are entering the rental market, ensuring that displaced families have a safe, healthy, and affordable place to live is one of the largest public policy challenges that Hawai‘i has ever faced.

98 “100 days after the Maui fires, 4 names remain on the missing list. These are the people trying to find them.” CNN.com, 18 Nov. 2023, Maui fires: 100 days later, 4 names remain on the Lahaina missing list. These are the people trying to find them | CNN. Accessed 29 Nov. 2023.
Based on its findings, the Shelter Working Group recommends that the Legislature:

1. Increase and leverage financing mechanisms to assist in building housing in West Maui;
2. Reduce regulatory barriers for the development of additional dwelling units and multifamily housing;
3. Support the counties in sufficiently utilizing short-term rentals as long-term rentals; and
4. Ensure support for the State's most vulnerable populations.

The response efforts to house residents in the immediate aftermath of the wildfires were facilitated by the Federal Emergency Management Agency (FEMA) and non-governmental organizations in conjunction with the flexibility provided by state and county emergency proclamations. The focus of the Shelter Working Group is to develop legislative options to ensure a myriad of housing pathways for the period after federal support ends and the emergency proclamations expire and increase the State's housing resilience in preparation for, and subsequent to, any future natural disasters.

This report does not make recommendations regarding the rebuilding of Lahaina because this working group recognizes and agrees that the eventual rebuilding of Lahaina will only take place through an updated community plan or similar process with extensive input from the community.

FINDINGS

Finding 1: Hawai'i is in a Housing Crisis

Hawai'i has the highest housing costs in the nation. Adjusted for inflation, the price of existing homes in Hawai'i has increased by 155% since 1984, with more than 40% of that increase in just the last two years due to a surge in demand, low interest rates, and continued low levels of supply. The University of Hawai'i Economic Research Organization (UHERO) recently published The Hawai'i Housing Factbook, which contains many sobering statistics for the State, including that less than one-third of households in Hawai'i can afford a median-priced single-family home, and less than one-half can afford a

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102 Tyndall, “The Hawai'i Housing Factbook.”
median-priced condo. Hawai‘i also has the highest rental prices in the nation, with the median monthly rent at $2,000. Within the State, Maui has the highest median posted rental prices at $2,500 a month. Due to these factors, Hawai‘i has the highest percentage of homeowners paying more than 30% of their income on their mortgage, making these households more vulnerable to increased stress, mental health problems, and an increased risk of disease. High housing prices are the primary contributor to high rates of homelessness nationwide, and, as would be expected given the dire housing market, Hawai‘i’s rate of homelessness is more than double the national average.

One clear contributor to high housing prices in Hawai‘i is the lack of housing supply, which lags behind the high demand. According to the 2019 Hawai‘i Housing Planning Study, "a significant amount of research has been reported in peer-reviewed journals to estimate the statistically significant correlation between the barrier and supply inelasticity and/or high housing prices". The study further states that "Hawai‘i’s housing market is supply inelastic. A change in demand does not lead to a change in supply in a timely or efficient manner. That leads to low production and high prices."

It is estimated that Hawai‘i needs to build 50,000 new homes between 2020 and 2025 to meet the demand for housing, with 28,000 of those needed to reduce "pent-up demand caused by years of supply shortages". However, over the last five years, Hawai‘i has only added 27,000 homes to the housing stock, a little more than half of the housing necessary to support the State’s population.

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103 Tyndall, “The Hawai‘i Housing Factbook.”
107 Tyndall, “The Hawai‘i Housing Factbook.”
109 SMS Research, Hawai‘i Housing Planning Study, 9.
110 SMS Research, Hawai‘i Housing Planning Study, 9.
111 SMS Research, Hawai‘i Housing Planning Study, 36.
112 Tyndall, “The Hawai‘i Housing Factbook.”
In addition to the slow rate of construction, Hawai‘i’s tropical climate and natural features contribute to high rates of demand for housing from people outside of Hawai‘i.\textsuperscript{113} While no reliable data sources show the amount of existing housing stock converted to vacant or seasonal use, survey data shows that 52\% of out-of-state owners leave their units vacant or utilize them seasonally.\textsuperscript{114} Utilizing data compiled by the United States Census Bureau, UHERO concludes that despite persistently high prices, Hawai‘i’s housing stock has not grown significantly in recent years, with Maui and Kaua‘i losing existing housing stock, likely due to out-of-state owners leaving units vacant and converting housing stock to vacation rentals in recent years.\textsuperscript{115}

The impact of short-term rentals varies statewide but is more significant on Kaua‘i and Maui, with 15\% of the housing stock consisting of vacation rentals\textsuperscript{116} and much of the units highly concentrated in individual towns, such as Princeville (71\% short-term rentals), Kōloa (44\% short-term rentals), and Lahaina (40\% short-term rentals).\textsuperscript{117} Short-term rentals make up only 2\% of the housing stock in Honolulu, but UHERO estimates that they increase housing prices in Honolulu by as much as 5\%. The impact is no doubt even greater on Kaua‘i and Maui.

Scores of studies show that new housing construction reduces housing prices.\textsuperscript{118} A 2018 paper co-authored by New York University Furman Center faculty directors finds that

\begin{itemize}
\item \textsuperscript{113} SMS Research, \textit{Hawai‘i Housing Planning Study}.
\item \textsuperscript{114} SMS Research, \textit{Hawai‘i Housing Planning Study}.
\item \textsuperscript{115} Tyndall, “The Hawai‘i Housing Factbook.”
\item \textsuperscript{116} Tyndall, “The Hawai‘i Housing Factbook.”
"adding new homes moderates price increases and therefore makes housing more affordable to low-and moderate-income families."  It is important to note that while the paper concludes that housing supply is necessary to reduce costs, it also argues that "[g]overnment intervention is critical to ensure that supply is added at prices affordable to a range of incomes".

Various studies have also concluded that housing regulations slow the rate of construction and lead to higher prices. A 2002 study on the impact of zoning on housing affordability describes how "zoning and other land use controls play the dominant role in making housing expensive." More specifically, another paper published by the Brookings Institute Center on Urban and Metropolitan Policy describes how "requirements for low-density-only, minimum housing size, or bans against attached or cluster homes" decrease supply and increase prices.

Hawai‘i has the most regulated housing market in the country. Multiple reports and studies have cited the State’s regulatory environment as a key factor in high housing costs

References:


120 Been, "Supply Skepticism: Housing Supply and Affordability", 1.


122 Glaeser, Impact of Zoning on Housing Affordability.


in Hawai‘i.\textsuperscript{125} A 2022 UHERO report, "Measuring the Burden of Housing Regulation in Hawaii", acknowledges that "rules for residential development can often be in the public interest" for reasons like ecological preservation and efficient management of infrastructure. However, the report also states that regulation can be counterproductive when it "reduces the supply of new homes, and leads to higher prices".\textsuperscript{126} UHERO specifically mentions the prohibition of multifamily units in most neighborhoods and lengthy permitting times as regulatory barriers to new housing.

The 2008 Affordable Housing Regulatory Barriers Task Force states the impacts of regulatory barriers bluntly:

\begin{quote}
Among those affected by the phenomenon of regulatory barriers on affordable housing in Hawaii are middle-income workers, including teachers, police officers, firefighters, veterans, hotel workers, and other vital contributors to society who are often forced to commute long distances because they are unable to find affordable housing in the communities they serve; lower-income families, elderly kupuna or future retirees, and younger families or college graduates just starting out.
\end{quote}

**Finding 2: The Housing Crisis Has Been Exacerbated by the Maui Wildfires**

While Hawai‘i was already profoundly suffering from the impacts of high housing costs due to low supply levels, the Maui wildfires exacerbated an untenable housing situation. According to Luke Myers of the Joint Housing Task Force, the fires damaged 3,631 properties, 60\% of which were rental housing. The fire destroyed a significant number of units targeted for low-income families, including:

- Ka Hale A Ke Ola Homeless Resource Center - West Maui, 220 individuals
- Hale Mahaolu Eono senior housing, 35 units
- Kaiaulu o Kupuohi mid-rise community, 89 units
- David Malo Circle Hawai‘i, 18 units
- Mill Street and Pi’ilani senior housing, 42 units
- Front Street apartments, 140 units

\textsuperscript{126} Inafuku.
SHELTER WORKING GROUP

- Hale Mahaolu Eono, 35 units
- Lahaina Surf, 112 units
- Weinberg Court, 62 units

The loss of these housing units comes simultaneously with a surge of demand in the rental market as displaced families compete for the limited supply of other existing housing stock on Maui. As noted in UHERO's 2023 report, "After the Maui Wildfires: The Road Ahead", complicating the loss of supply, displaced families are now searching for housing in one of the nation's most expensive markets." This will put upward pressure on housing prices. An example of this can be seen in the aftermath of California's 2018 Camp Fire, where housing costs, homelessness, and poverty in nearby communities increased.127

UHERO estimates that the lost residential structures were valued at $554 million, representing 3% of Maui’s housing stock, while the Pacific Disaster Center estimates that the cost to rebuild is $5.52 billion. The two figures have a wide discrepancy because many of the residential structures, while habitable, were aging, and the cost to rebuild to meet current energy and building code requirements at current construction costs is significant.

Finding 3: Current Federal, State, and County Action on Housing Relief

Chapter 127A, Hawaii Revised Statutes, provides the Governor and each county mayor with wide latitude to suspend state or county laws and create new rules in the event of a state of emergency declared by the Governor or local state of emergency declared by a county mayor. On September 8th, 2023, Maui County Mayor Richard Bissen signed the fourth emergency proclamation in response to the wildfires, which suspends, among other relevant sections of the Maui County Code, the Maui County zoning code and the building and construction code to ensure the expeditious discharge of emergency management functions.

In addition to the emergency rules, Governor Josh Green created the Joint Housing Task Force to identify short- and long-term housing solutions. According to the Task Force, there have been 12,153 individual referrals to FEMA housing, of which 5,072 have been deemed ineligible for FEMA support. Several factors determine FEMA eligibility, including United States citizenship, residency as either a renter or an owner in a home in the affected area,

and a lack of homeowner’s insurance that covers displacement costs (FEMA will not duplicate existing insurance benefits). According to the American Red Cross, as of November 22, there were 6,646 displaced individuals sheltering in hotels. Of those, only 47 households have identified housing solutions that would enable them to transition out of the hotel shelter program within the next 30 days.

Because hotel units are not suitable for long-term living, FEMA’s goal is to move all eligible applicants out of hotels into suitable long-term housing by February 10, 2024. If there are not enough homes at this time, the State may request for FEMA to extend the program for these hotel units; however, there is no guarantee of an extension. FEMA will cover 175% of Fair Market Rate for rental costs at varying rates per number of bedrooms. Homeowners with Federal Housing Administration mortgage insurance are eligible for foreclosure moratorium and forbearance on their mortgage.128

The conversion of short-term rentals to long-term rentals presents a viable opportunity for housing significant numbers of displaced residents. Another option that FEMA is exploring is the direct lease of an existing building with the intent of subleasing units back to displaced residents. RVs and trailers are unsuitable for various reasons, including United States Department of Housing and Urban Development regulations, high shipping costs, and because they do not hold up well in Hawai‘i’s humid and salty environment.

FEMA can also install infrastructure and build modular units, which presents an opportunity to fill future housing needs. After FEMA support ends, the State, county, or a private landowner can repurpose the infrastructure for permanent housing needs, and the modular units could be repurposed for homeless transitional housing or other uses. The Joint Housing Task Force, led by the County of Maui and supported by FEMA and the State, is working to identify appropriate sites for modular units in West Maui, Central Maui, or South Maui. The Task Force estimates that it could take six to nine months to build interim prefab units. This could yield hundreds of additional interim units.

In addition to FEMA’s disaster support, which will last for the next 18 months, there are several other sources of post-disaster federal money that the County of Maui and the State can access for rebuilding, including the FEMA Hazard Mitigation Grant Program, Community Development Block Grant - Disaster Recovery, and United States Department of Agriculture Rural Development Loans. These funds can go towards property acquisition, infrastructure, or vertical housing construction to fill long-term needs.

128 Capps, “How to Rebuild Housing After the Maui Wildfires.”
Private entities have begun building temporary housing on private land. However, the County of Maui is in the process of developing emergency zoning rules allowing the legal use of those units as temporary housing.

**Finding 4: Assistance for Individuals who are Ineligible for FEMA Relief**

The Stafford Disaster Relief and Emergency Assistance Act prevents FEMA from using federal funds to support non-citizens, such as undocumented immigrants and Compacts of Free Association (COFA) migrants. While the total number of affected undocumented immigrants is unknown, 40% of the pre-wildfire population of Lahaina was Filipino, and Filipino immigrants constitute the largest source of undocumented immigrants in Hawai‘i.\(^{129}\) In addition to Filipino immigrants, there are a large number of Latino families in Lahaina, which constitute both documented and undocumented individuals.

While undocumented immigrants remain ineligible for federal support programs, if any of a non-citizen’s family members, such as a child born in Hawai‘i, are United States citizens, they can qualify for federal benefits such as FEMA rental assistance and the Temporary Assistance for Needy Families Non-Recurring Short-Term Benefits Program. However, *Honolulu Civil Beat* reports that many immigrants, even those eligible for assistance, distrust government agencies and have been reluctant to come forward.\(^{130}\)

The American Red Cross is currently providing funding for 145 FEMA-ineligible households to shelter in hotel units until at least February 10, 2024. This includes COFA migrants, non-citizens, and the pre-disaster unhoused who have children or medical conditions. In addition, through the Host Housing Support Program, funded by the American Red Cross and administered by the Council for Native Hawaiian Advancement with support from the Hawai‘i Community Foundation and County of Maui, any host family who has absorbed any affected resident into their household is eligible for $375 per month per individual, up to $1,500 for six months.\(^{131}\) Every family, whether documented, undocumented, or COFA

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migrants, is eligible to receive an American Red Cross case manager to help them navigate federal, state, county, and non-governmental organization programs.

Those who were unhoused before the disaster are also ineligible for FEMA relief. While those with medical conditions or young families are being temporarily supported by the American Red Cross in hotels, for individuals who do not meet those qualifications, the Hawai‘i Department of Human Services has built a temporary transitional housing site, mainly using tents on a parcel of state property near the Kahului Airport. As of October 8, 2023, there were 125 residents at the transitional housing site, which has the capacity for 150 residents. The Department of Human Services intends to utilize the space for six months while the Governor’s Coordinator on Homeless works on longer-term housing using the Kauhale model.

Finding 5: Rebuilding of Lahaina is Outside the Scope of this Report

All of Hawai‘i, and especially Maui residents, are still grieving. The rebuilding of Lahaina will require time to heal and for the community to come together to determine what they envision for the future of the town. It is premature for the Legislature to weigh in on how Lahaina will be rebuilt. Thus, this report does not intend to make any recommendations on this matter. However, the Working Group notes that many complexities face the rebuilding of Lahaina.

After the 2018 Camp Fire in California, it took three years to rebuild 75% of the town of Paradise even though many more resources, including thousands of contractors and hauling companies, were available to Paradise than are available to Maui. The Maui wildfires are much more complex, with a lack of readily available labor and supplies. The full extent of damage to underground water and wastewater systems remains unknown, but early estimates are that rebuilding the water infrastructure alone will take two to three years and cost upwards of $80 million132

*The New York Times* reports that many of the homes lost in the fire were older homes that were passed down between generations.133 Many of those homes had no mortgage, meaning some were uninsured or underinsured, which will make rebuilding difficult.

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These concerns, along with anecdotal reports of speculative offers for these properties, and the likelihood that newly constructed homes will rent for higher prices than aging homes, has led to concerns that kamaʻāina families could be pushed out of a gentrifying Lahaina.

Because much of Lahaina was built out based on old building codes and zoning standards, several intractably complex policy problems are ahead, which will likely get resolved through an extensive community planning process. Increased setback requirements, substandard roadways, outdated building codes, and increased parking requirements are just some of the modern code changes that make rebuilding difficult. However, neither the State nor the county can simply waive those codes, as was done after Hurricane Iniki on Kauaʻi, because FEMA funding and insurance will likely require that new buildings meet current code requirements and are built outside of hazard areas. Additionally, UHERO has highlighted concerns that the replacement of Lahaina’s older housing stock with new homes could lead Lahaina to re-emerge "as an elite, even less affordable community."134 Some strategies discussed by UHERO to mitigate this outcome include accelerating existing affordable housing projects, "relaxing Maui’s onerous housing restrictions, [and] streamlining development of multifamily housing with higher density on smaller footprints."135

Finding 6: Many Gaps and Challenges Remain

While there is ample federal support to assist families in acquiring temporary housing, the primary challenge to housing displaced families is the lack of available housing. The housing shortage impacts FEMA’s ability to find adequate housing for those displaced by the fires, leading to the displacement of tenants in existing rental stock, while the surge of demand combined with the contraction of supply will likely put even more upward pressure on rental prices statewide.

There are anecdotal accounts of households converting their garage spaces to housing units or utilizing other unconventional means to house displaced families. However, Maui County’s current zoning laws and severe lack of infrastructure make it impossible for many home conversions to be legally permitted. Zoning and infrastructure barriers reduce the Maui community’s ability to absorb displaced families. It also reduces the rental income homeowners can receive when they house displaced families. Without a legal rental unit,

134 Bond-Smith, "After the Maui Wildfires".
135 Bond-Smith, "After the Maui Wildfires". 
homeowners housing displaced individuals are only eligible for the Host Housing Support Program and not FEMA rental assistance.

In addition to the short-term impact on the statewide housing market, the more than 3,000 applicant families receiving FEMA support for housing will very likely face a prolonged gap in benefits as federal support programs will expire before families can rebuild in Lahaina. In 18 to 24 months, many households will likely have to pay a mortgage for a parcel in Lahaina while struggling to cover rent in a different household. This creates the conditions for a possible tragic exodus of families from Hawai‘i who cannot afford the high cost of rent here in the State and the cost of a mortgage for a parcel with no home on it.

The State needs to prepare for this spending gap through ongoing financial support for displaced households and measures that address the housing crisis statewide. The likely surge in construction in three to five years as rebuilding begins in Lahaina will further stress an existing shortage of construction laborers in Hawai‘i, making the next three to five years a vital time to try to increase the housing stock outside of Lahaina town.

The lack of available housing on Maui and the surge in demand for rental units have the potential to negatively impact tenants island wide. While Governor Green has prohibited rent hikes and eviction due to non-payment of rent, there are concerns from the community and anecdotal evidence that tenants are being forced out of their housing to make room for families displaced by the fires. The Governor's eviction moratorium does not include cancellations of month-to-month leases or eviction due to a landlord housing a family member. Those displaced in this secondary manner cannot access current state or federal relief programs.

Due to a lack of on-the-ground interpreters and document translation services from federal, state, and county service providers, limited English proficient individuals and immigrants face significant barriers to accessing services. Immigrant service providers in Lahaina have expressed concern that a significant portion of Lahaina’s immigrant community is not getting access to services they are eligible for, such as housing support.

While there are short-term guarantees of support for victims of the fire who are ineligible for federal relief programs, including the homeless, non-citizens, and COFA migrants, there

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are no guarantees of support beyond the next few months, and existing law does not require the State to provide support to these families in the aftermath of a natural disaster.

In addition to those who are ineligible for federal relief programs, the disaster has put a strain on other vulnerable populations, such as victims of domestic violence. Likely due to the increased stress from both the physical threat of the wildfires and the compounding socioeconomic ramifications of the disaster, Maui’s domestic violence shelter has had call volume to their hotline more than double since the wildfires. Domestic violence is a primary cause of homelessness for women and children; as such, this staggering increase in domestic violence on Maui has the potential to lead to increased rates of homelessness among women and children.

RECOMMENDATIONS

The Maui wildfires are an incalculable tragedy in terms of lost lives and homes. The next tragedy has the potential to unfold more slowly, over months and years, as the State’s existing housing crisis becomes even more untenable for individuals and families. While we cannot go back to August 8th and take steps that may have prevented the devastating fires, there is still time to take action and develop the policies necessary to ensure that families can remain and thrive in Hawai‘i. During the Regular Session of 2024, the Legislature must act on the structural causes of the housing crisis and the housing ramifications of the Maui wildfires and inevitable future natural disasters.

Recommendation 1: Leveraging State Financing Options

The ability to secure financing will play a major role in providing long-term housing and the rebuilding of Lahaina.

(1) The Hawai‘i Housing and Finance Development Corporation (HHFDC) should expedite Low-Income Housing Tax Credit (LIHTC) projects already funded with a match from the Rental Housing Revolving Fund and a portion of the State’s private activity bond allocation. This can be done through the county expediting approvals and permitting. The State may also consider subsidizing an additional shift of construction workers to expedite the overall construction timeline. According the HHFDC, LIHTC projects in the pipeline include:

- Kaiāulu o Kūku‘ia (West Maui) - 200 units - already under construction
- Hale O Pi‘ikea 1, 2, and 3 (South Maui) - 223 units - in permitting
• Liloa Hale (South Maui) - 117 units - in permitting

• Kaiāulu o Kupuohi (West Maui) - 89 units (rebuild) - construction plans are very recent

• Kahului Civic Center, Phase 1 (Central Maui) - 200 units - developer just selected

(2) The Legislature and HHFDC should closely monitor the replacement of structures burned in the fire that were financed through LIHTC or other public funds to ensure they are rebuilt in a timely manner. Additional support may be required if insurance does not fully cover the costs of the rebuild to ensure the long-term affordability of these projects. The Hawai‘i Public Housing Authority should also develop a plan to replace its destroyed units in a timely manner.

(3) HHFDC should work with developers to ensure additional housing projects are ready to be built and funded on Maui. If there is a sufficient pipeline, a larger portion of the State’s private activity bond volume should be allocated to Maui for the next three to five years to ensure more LIHTC projects are built to help families in the 60% of the Area Median Income (AMI) and below range.

(4) State funds should be effectively leveraged with the Maui County Affordable Housing Fund and Community Development Block Grant - Disaster Recovery funds. HHFDC should lead coordination efforts to help developers create the appropriate financing mix to create more long-term housing on Maui.

(5) The Legislature should appropriate additional funds for “Tier 1” households with income at 60% of AMI and below and “Tier 2” households with income from 60% to 100% of AMI, specifically on Maui. The Legislature should also designate recurring sources of funding for these purposes.

(6) In the Regular Session of 2023, the Legislature appropriated $45 million for the acquisition of the Haggai Institute in South Maui. HHFDC should take the lead and work with the County of Maui to close on the acquisition and begin rehabilitation of the facility to be used for long-term workforce housing.

(7) The Dwelling Unit Revolving Fund should be fully utilized and possibly expanded, or one or more revolving funds should be created to assist with the construction of housing on Maui.
(A) With the rising interest rate environment, HHFDC should reinstate its low-interest loan program. These loans could serve as a lifeline for affected homeowners, enabling them to rebuild and recover their homes and communities.

(B) HHFDC should expand the Dwelling Unit Revolving Fund Equity Pilot Program, established in 2023, to also assist impacted Maui homeowners looking for low-interest financing.

(C) Allow the Dwelling Unit Revolving Fund to be used to provide low-interest loans for accessory dwelling units that can be used to house displaced families and alleviate the broader housing crisis in Hawai‘i. Many middle- and low-income families often cannot finance these units, especially in a high interest rate environment.

(D) The Legislature and HHFDC should identify parcels in strategic locations for future housing developments on Maui and possibly acquire the land and develop the parcels to increase housing capacity.

(8) HHFDC should identify, and the Legislature should fund, strategic regional infrastructure upgrades, such as water and wastewater systems, on Maui to help spur the development of housing outside of the core burn zone.

Recommendation 2: Streamlining Regulatory Burdens

Regulatory barriers add time and costs to the development of housing. If the State can ease some of the burdens of regulation, this may increase housing capacity.

(1) The first priority of the Maui County Comprehensive Affordable Housing Plan is to update the county zoning code to lower housing costs and promote affordability by design. This recommendation is echoed in UHERO's report, "After the Maui Wildfires: The Road Ahead." To increase affordability statewide and give homeowners more flexibility over the use of their properties, the Legislature should reduce zoning and regulatory barriers and permitting fees for additional dwelling units, multifamily housing, and prefab housing within the urban state land use district.

(2) While numerous private individuals have set up temporary housing on private land, the County of Maui has not established an emergency zoning code that would allow the siting of temporary shelters, such as trailers, recreational vehicles, and prefab housing. The Legislature should coordinate...
and/or task appropriate agencies, including the Office of Planning and Sustainable Development and Hawai‘i Emergency Management Agency (HI-EMA), to create a model statewide emergency zoning law to allow certain properties to host temporary shelters for a period of time following the declaration of a state of emergency or local state of emergency.

**Recommendation 3: Utilizing Short-Term Rentals for Long-Term Housing**

Having adequate long-term housing stock in the near future will be contingent upon the availability or construction of replacement housing stock. Data provided by UHERO indicates that the zip code of Lahaina currently has 4,694 active short-term rentals. Therefore, to solve the short-term housing crisis, the County of Maui should incentivize short-term rental owners to convert to long-term housing through tax incentives or other necessary means.

If this does not work to create additional long-term supply, the County of Maui should also have the tools necessary to increase the housing stock for a temporary period of time.

Currently, counties are prohibited from phasing out the zoning of non-conforming residential uses of single-family homes or duplexes. The counties have interpreted this to include a blanket prohibition on changing the zoning of short-term rentals without allowing existing short-term rentals to continue to operate through non-conforming use permits. With 40% of Lahaina’s housing stock utilized for short-term rentals, the Legislature should authorize the counties to phase out non-conforming short-term rentals as a tool to create long-term housing. Similarly, the Legislature should ensure that the counties have all the authority needed to regulate legal and illegal short-term rentals.

**Recommendation 4: Housing Vulnerable Populations**

1. Non-citizens, including COFA migrants and undocumented individuals, are at significant risk of displacement after a natural disaster due to their lack of federal support. FEMA has directed these individuals to the American Red Cross, and various philanthropic organizations are supporting COFA migrants and undocumented individuals. The Department of the Attorney General should continue to investigate and monitor non-profits for potentially fraudulent activity. The Legislature should identify supportive programs for this segment of the population, including a possible infusion of funds to the Temporary Assistance for Other Needy Families program for those with children.
(2) The population who experienced houselessness before the wildfires and those at increased risk of becoming houseless due to the wildfires, such as victims of domestic violence, need a long-term solution since the only West Maui homeless resource center burned in the fire. The temporary tent site near Kahului Airport should be converted into a longer-term housing solution. The Governor’s Emergency Proclamation on Homelessness includes many elements of building longer-term temporary housing. The Legislature created ‘ohana zone exemptions to allow construction to occur quickly. A commitment to building more housing for those most in need is necessary, and the Legislature should pass a comprehensive law that allows construction of either ‘Ohana Zone or Kauhale sites to be streamlined without the need for an emergency proclamation. Homelessness is an issue that will only be solved by increasing subsidized housing inventory for the foreseeable future on Maui and throughout the State.

(3) The total cost of owning a home must be carefully monitored. Ancillary costs, such as homeowners’ insurance, can strain a family’s ability to make ends meet each month. The wildfires will likely cause all insurance premiums to increase. The Legislature and State Insurance Commissioner should monitor the increase in premiums, ensure premiums are attainable and reasonable, and ensure that homeowners have options if private insurers withdraw from doing business in Hawai‘i. The Legislature should remain proactive in ensuring a healthy insurance market for consumers as insurance premium rates change.

(4) Many families cannot bear the financial burden of a mortgage and/or homeowners association fees for a home that is uninhabitable or no longer exists. The Legislature should consider temporary mortgage forbearance, homeowners association fee forbearance, and a foreclosure moratorium on homes rendered uninhabitable due to natural disasters.
Wildfire Prevention Working Group

PURPOSE
To identify the causes of wildfires and preventative action that may be taken to reduce the risk of wildfires throughout the State and prepare recommendations for appropriate legislative action.

SUMMARY
Hawaii is facing a growing wildfire crisis. Significant transitions in large-scale land use over the past several decades, combined with the mounting impacts of climate change, have dramatically increased the size and intensity of wildfires across the State. We are at a critical decision point. Bold action is required to address the key drivers of catastrophic fires, significantly increase the pace and scale of land management, and improve the resilience of Hawaii's most vulnerable communities.

Over the past several months, the Wildfire Prevention Working Group (Working Group) met with stakeholders, received community input, and consulted with subject-matter experts. On November 17, 2023, the Wildfire Prevention Working Group held a public hearing on its draft report. The Working Group received thoughtful and constructive feedback from many individuals and organizations. The members of the Working Group would like to express deep gratitude to the community for helping to contribute to this final report.

Given the short amount of time to develop this report, some of the recommendations are preliminary and will need further development and vetting prior to the upcoming legislative session. The process of developing best practices and strategies for wildfire prevention regimes is constantly evolving as wildfire regimes are complex and multifactored.

FINDINGS

Finding 1: Call to Action: Wildfires are a Growing Threat in Hawaii

- The annual area burned by wildfires in Hawaii has increased 300% between 1904 to 2022.137

In the decade following 2006, almost 1,000 wildfires burned an average of 20,000 acres a year statewide, with some years reaching closer to 45,000 acres.138

Large fires (greater than 1,000 acres) have occurred on all islands and happen multiple times each year across the State.139

Every year, about 0.50% of Hawai‘i’s total land area burns, which is greater than the proportion of land area burned across the entire United States mainland (0.30%) and even across the 12 states in fire-prone western states (0.46%, including Alaska) over the same period.140

Wildfires destroy native watersheds and change soil, which threaten native species and their forest habitats. As Hawai‘i is the endangered species capital of the world, many areas that are vulnerable to fire are critical habitats for numerous threatened and endangered species. Loss of habitat can mean extinction for species that are limited to fire-prone areas.141

Heavy rain events after fires cause erosion and loss of topsoil that leaves areas completely bare and unable to support vegetation.142

Post-fire erosion fills streams with sediment, ultimately depositing the sediment in the ocean. This sedimentation smothers coral reefs, creating massive impacts on nearshore water quality, fisheries, and long-term reef ecosystem health.143

Loss of critical watersheds and burned soil from wildfires decrease aquifer recharge, affecting our drinking water sources.144

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139 Pickett, E. Hawaii Has a Devastating Wildfire Problem.


141 Pickett, E. Hawaii Has a Devastating Wildfire Problem.

142 Pickett, E. Hawaii Has a Devastating Wildfire Problem.

143 Pickett, E. Hawaii Has a Devastating Wildfire Problem.

144 Pickett, E. Hawaii Has a Devastating Wildfire Problem.
• Climate projections indicate that areas of highest fire risk are predicted to shift upward in elevation, increasing the threat to watershed resources.\textsuperscript{145}

Finding 2: Causes of Wildfires in Hawai‘i

- People are the primary drivers of wildfires in Hawai‘i, as 99% of wildfires are caused by human ignitions.\textsuperscript{146} Natural causes of ignition are very rare, with lava restricted to active flows on Hawai‘i Island and lighting strikes accounting for less than 0.2% of attributed wildfire causes.\textsuperscript{147}

- Accidental ignitions (75%) are a top cause of wildfires including: campfires, equipment, vehicles, downed power lines, and fireworks.\textsuperscript{148}

- 26% (approximately 1,000,000 acres) of Hawai‘i’s total land area has been invaded by non-native, fire-prone grasses and shrubs.\textsuperscript{149}

- Guinea grass, fountain grass, molasses grass, and buffelgrass can form continuous fuel beds, ignite easily, attain extremely high fine fuel loads, and are capable of growing back more vigorously in the post-fire environment than the majority of native vegetation.\textsuperscript{150}

- The grass-fire cycle perpetuates the problem.\textsuperscript{151} Each time fire burns into native forest, it allows the opportunity for non-native species to flourish. This means the fire problem is growing with each new fire.

- Climate is a central determinant of wildfire occurrence and behavior, and climate change has been linked to increases in fire activity.\textsuperscript{152} A warming, drying climate, as well as increased frequency and strength of El Niño events have led to drought conditions that greatly increase the wildfire problem.\textsuperscript{153} Recent research also suggests a connection between hydrological drought and wildfire susceptibility.\textsuperscript{154}

\textsuperscript{146} Trauernicht, Clay. “The 2023 Maui Fires and the Context for Improving Wildfire Safety in Hawaii”.

\textsuperscript{147} Trauernicht, Clay, et al. “The contemporary scale and context of wildfire in Hawai‘i.”


\textsuperscript{149} Pacific Fire Exchange, "Overview of Wildfire in Hawaii" at slide 12.

\textsuperscript{150} Trauernicht, Clay, et al. “The contemporary scale and context of wildfire in Hawai‘i.”

\textsuperscript{151} Pacific Fire Exchange, "Overview of Wildfire in Hawaii” at slide 13.

\textsuperscript{152} Trauernicht, Clay, et al. “The contemporary scale and context of wildfire in Hawai‘i.”

\textsuperscript{153} Pickett, E. Hawaii Has a Devastating Wildfire Problem.

Finding 3: Current Challenges to Wildfire Prevention and Response

- Hawai‘i spends less than other states on wildfire prevention and response, budgeting an annual average of $3.2 million over the past decade; about $2 per resident. In contrast, Washington State budgets, on a per capita basis, more than double the funding than Hawai‘i does for fighting wildfires, appropriating an average of $83 million between 2015 and 2019. California set aside $21 per resident in fiscal year 2022 — $843 million. Oregon pays about 35 cents more per resident than Hawai‘i to fight wildfire but has also invested hundreds of millions into an emergency fund.\(^\text{155}\)

- Declines in active agriculture land use have reduced maintenance and access to roads, water sources, equipment, and assistance, which previously supported firefighting.\(^\text{156}\)


\(^\text{156}\) Trauernicht, Clay, et al. “The contemporary scale and context of wildfire in Hawai‘i.”
• Wildfires are a threat to human life as communities have developed on former agricultural land over the last several decades. Many neighborhoods in Hawai‘i have fire hazard issues, such as a single ingress/egress, pipe and fire suppression systems that are outdated or overburdened, narrow streets, and few firetruck turnaround options, which threaten life.\textsuperscript{157} The Hawai‘i Wildfire Management Organization’s State Wildfire Hazard Assessment in 2014 found that two-thirds of Hawai‘i’s communities have only one way in and out.

• Hawai‘i has not adopted building standards that would better protect structures against wildfires, such as requiring the use of fire-resistant materials and construction techniques or mandating that spaces around certain structures are clear of flammable vegetation. Twenty-one states, including California and most other Western states, have adopted specific standards for fire mitigation, according to the International Code Council.\textsuperscript{158}

• Most of Hawai‘i’s communities do not yet have well-developed and comprehensive emergency preparedness and disaster response plans. The Firewise USA\textsuperscript{®} program helps communities adapt to living with wildfire and encourages neighbors to work together and take action now to prevent losses. Many communities that do have Firewise plans have not necessarily integrated those Firewise plans into broader and more holistic emergency preparedness and disaster response plans.

• During the recent Maui fires, the counties were not able to utilize the Intrastate Mutual Aid Act under Chapter 127D, Hawaii Revised Statutes, to share additional firefighting resources.

• Hawai‘i is the only state without a State Fire Marshal. The responsibilities of a state fire marshal are currently carried out by the State Fire Council. Other states have a State Fire Marshal who is appointed by the Governor and who has enforcement authority.

\textsuperscript{157} Pickett, E. Hawaii Has a Devastating Wildfire Problem.
Currently, there are some county fire companies within the State operating with staffing levels below the national standard.\textsuperscript{159}

**Finding 4: Current Strengths of Wildfire Prevention and Response**

Current strengths of wildfire prevention and response include:

- **Social Infrastructure:** relationships across agencies, engaged communities, educational resources, and community-driven plans (Firewise Communities, Community Wildfire Protection Plans);\textsuperscript{160}

- **Local and indigenous knowledge for fuels management:** traditional agriculture practices, grazing, ecosystem restoration, plant propagation, and historic uses of water;\textsuperscript{161}

- **Science and technology fundamentals:** high-resolution fire history data, current and future fire probability maps, fuels maps, climate data, best practices for post-fire, and fuels mitigation;\textsuperscript{162}

- **Hawaii’s unique and evolving law regarding water usage,** which holds that water remains in the public trust.\textsuperscript{163}


\textsuperscript{160} Trauernicht, Clay. “The 2023 Maui Fires and the Context for Improving Wildfire Safety in Hawaii”.

\textsuperscript{161} Trauernicht, Clay. “The 2023 Maui Fires and the Context for Improving Wildfire Safety in Hawaii”.

\textsuperscript{162} Trauernicht, Clay. “The 2023 Maui Fires and the Context for Improving Wildfire Safety in Hawaii”.

\textsuperscript{163} Legal issues regarding access and use to water remains contested in Maui County. What is clear are the particular ways water rights are articulated in law, differentiated from other American states. Since 1978, the Hawaii State Constitution has held that water, along with land, air, minerals, and energy sources, are held in trust by the State for the benefit of the people. Article XI, Section I of the Hawaii Constitution states, "For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources . . . “ Further, the Hawaii Supreme Court has held that "[t]he state also bears an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible." In re Water Use Permit Applications. West Publishing Company, vol. 94, p. 97, 2000.
RECOMMENDATIONS

Recommendation 1: Reducing Ignitions

- Create a public awareness campaign about preventing ignitions, which is key to effective wildfire prevention.

- Increase criminal penalties for arson in the fourth degree (currently a misdemeanor) during red flag warnings. Enhance the ability of law enforcement to remove arsonists from a community.

- Increase monetary penalties for violations of Chapter 132, HRS, (currently $500) to improve compliance with state and county fire codes.

- Statewide limitation on consumer fireworks, except by permit for cultural events (See State Fire Council package H.B. No. 145, Regular Session of 2023) and enforcement of state and county laws related to the trafficking, sale, and use of fireworks.

- Develop best practices regarding downed power lines and electrical power supplies during times of possible ignition. Utilize technologies such as covered conductors, sensitive ground fault detection, and line-to-ground fault neutralizer.
equipment to rapidly identify fault locations, eliminate the power available to cause ignition, and enable rapid repairs.

- Promote strategic undergrounding of utility lines in priority fire hazard risk areas and in all new utility line developments.

- Engage with counties, community organizations, and encampments to manage lands and reduce the risk of wildfires (See Puʻuhonua O Waiʻanae and ʻĀina Alliance in Anahola as examples).

- Increase support for practices that increase the infiltration and retention of water in the soil, enhancing groundwater recharge.

- Increase support for native plant nurseries and seed banking initiatives intended to provide inventory for watershed restoration projects and projects that restore ecosystems to natural fire patterns. This could include scaling up and standardizing production for native plant seeds (like seed farms)\(^{164}\) and determining policies for seed access and distribution.

**Recommendation 2: Reducing Fuel Loads**

- Additional resources, incentives, and policies to encourage mitigation actions, especially where land use is changing (for example, developments on former or inactive agricultural land).

- New requirements to promote the creation and maintenance of “defensible space” by both public and private property owners, with proactive enforcement and legal consequences for violations.

- Preparedness planning, infrastructure improvements, and reducing fuels (burnable plant material) to increase safety and effectiveness of firefighting efforts.

- Support large-scale green waste processing or composting to help landowners who want to reduce fuels.

- Create incentives for managed grazing as a fuel reduction tool and encourage more managed grazing permits on state lands, where appropriate.

\(^{164}\) Introduced grass species tend to burn at a high intensity around 60% relative humidity; however, native pili grass burns at a high intensity at 40% relative humidity. Hawai‘i experiences fewer days with 40% relative humidity.
• Include high fuel load and high fire risk as factors to be considered in determining location of forest restoration projects using state and county funding.

• Assess estimated costs of different fuels management strategies (mowing, grazing, green strips, restoration) to provide options to landowners.

• Strengthen biosecurity efforts to prevent the introduction of new non-native flammable plant species into the State and support early detection and rapid response when new plant species are discovered.

• Active state engagement in cross-boundary land partnerships (for example, watershed partnerships) that share resources to create a larger ecosystem that is conducive to sustainable agriculture and reducing fuel loads in a holistic manner. This could include increasing personnel or capacity to develop cross-boundary plans for fire risk mitigation actions and resource sharing and identification/mapping of fire-related resources.

• Prioritize incentives for sustainable local food production when considering various land management practices and strategies (for example, helping farmers with the significant investment in converting fallow land into agricultural production).

Recommendation 3: Community Engagement

• Encourage Firewise Communities to help communities adapt to living with wildfire and encourage neighbors to work together and take action now to prevent losses.

• Support development of Community Wildfire Protection Plans across the State.

• Modify existing emergency preparedness and disaster mitigation plans to incorporate Community Wildfire Protection Plans where necessary. Implement planning processes that consistently and continuously identify state and county resources needed to effectuate these plans.

• Seek permanent funding for community programs, landowner wildfire education and technical support, and multi-partner wildfire risk reduction planning.

Recommendation 4: Protecting Communities

• Develop an inventory of best practices for planning, zoning, development review, and code enforcement to address and reduce wildfire hazards and risks.
• Work with the Public Utilities Commission and Hawai‘i State Energy Office to develop best practices and laws regarding electrical infrastructure and power lines.

• Update building standards to better protect structures against wildfires.

• Incorporate fire hazard mitigation standards for community planning, design and engineering, such as wildfire-safe subdivision designs, defensible space around homes and communities, adequate emergency access, fire roads, and water infrastructure. The State Building Code Council should consider adoption of the International Wildland-Urban Interface Code, which has requirements to determine the level of wildfire risk, vegetation management and mitigation, and flexibility to modify “areas at risk” over time.

• Work with industry experts, such as the Insurance Institute for Business and Home Safety and National Institute for Standards and Technology, to develop home hardening guidance.

• Create tax or insurance incentives for wildfire-safe structures.

• Disincentivize land banking through increased taxation of lands not being used for public purposes or managed through an appropriate conservation plan.

• Review other states’ models for creation of a State Fire Marshal with enforcement authority and investigators.

• Expand the network of HI-EMA sirens and upgrade capacity with cameras or other technology as it becomes available.

**Recommendation 5: Wildfire Suppression**

• Increase response capacity by state and county personnel.

• Consider the creation of volunteer fire departments in rural or remote areas where fire response is limited.

• Support setting a state staffing standard ensuring all county fire companies maintain staffing levels that, at minimum, meet the national standard.

• Maintain and update wildfire-specific equipment and wildfire-suppression infrastructure statewide (firefighting aircraft, dip tank expansion, reservoir restoration).
• Negotiate standing agreements to use privately-owned water storage sources or other firefighting resources where available.

• Expand wildland fire training opportunities across all response agencies, with consideration of the standards set by the National Incident Management System and the National Wildfire Coordinating Group.

• Ensure counties’ ability to provide intrastate mutual firefighting aid.

• Authorize Hawai‘i to participate in a State Wildfire Compact to support efficiently moving fire resources interstate.

Recommendation 6: Post-Fire Response

• Provide resources for post-fire rehabilitation efforts, such as erosion control, long-term forest restoration, planting native species where possible, and suppressing and removing weeds.

• Where appropriate, consider use of hydro-spray short grasses appropriate for grazing as an independent measure or one to be used in conjunction with planting native trees.

• Develop greater local capacity and resources for post-fire assessments, like Burned Area Emergency Response (BAER) Teams. The U.S. Forest Service BAER teams are specially trained professionals that can quickly respond after a wildfire to minimize future harm to people, property, or natural resources.

Recommendation 7: Wildfire Research

• Water resources assessment to better understand the availability of water resources for fire suppression and prevention/mitigation efforts such as green firebreaks.

• Assessment of seed production/storage, evaluate needs for seed bank and/or nursery to deliver seeds and seedlings to public and private landowners whose properties are affected by wildfires.

• Evaluate use of “green” firebreaks created through the strategic planting of water-rich, fire-resistant native species that help to halt the spread of wildfires.

• Fire Assessment/Mapping to determine areas of high risk to help prioritize mitigation and prevention efforts.
• Build upon existing research on the complex impacts of climate change on wildfire regimes, especially the risks of compounding hazards associated with extreme weather events such as hurricanes and drought.

• Analyze the extent to which hydrological drought impacts wildfire susceptibility in Hawai‘i, to include analysis of the connection between low ground water levels and increased fire activity.

• Examine other ecosystem benefits of wildfire mitigation actions and their use as practical incentives for promoting better land use practices.
### Summary of Findings

#### ENVIRONMENTAL REMEDIATION WORKING GROUP

<table>
<thead>
<tr>
<th></th>
<th>Monitoring for Environmental Contamination</th>
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</thead>
<tbody>
<tr>
<td>1A</td>
<td>Various state departments and organizations are conducting testing and monitoring of water and air samples to determine any immediate environmental contamination risks. Long-term monitoring is preferable to evaluate whether there are any long-term risks to human health and the ecosystem.</td>
</tr>
<tr>
<td>1B</td>
<td>Several entities will be conducting various nearshore coastal water quality testing and contaminant testing. The information gathered from these sources will be analyzed on a long-term basis and compared to baseline data to inform authorities of emerging concerns and changes in water quality over time.</td>
</tr>
<tr>
<td>1C</td>
<td>Sediment samples and lipid-based collection samples are being collected to test for a wide range of contaminants. To minimize further contamination of the nearshore reef, absorbent booming has been implemented along storm drains. However, long-term threats to coastal waters and reefs may persist as runoff, debris removal, and rebuilding efforts will potentially release more toxic ash and contaminated sediment. Therefore, sustained long-term monitoring is recommended for at least five years following the disaster to understand the scope of the contamination.</td>
</tr>
<tr>
<td>1D</td>
<td>The Lahaina Water Treatment Facility was compromised due to ash and saltwater intrusion into the system. The intrusion caused complications with the biological organism treatment system, and plans are underway to locate the sources of intrusion.</td>
</tr>
<tr>
<td>1E</td>
<td>The Maui County Department of Water Supply has collected over 800 samples of water from areas affected by the Maui wildfires and, together with the Hawai‘i Department of Health, will continue water sampling to provide long-term information on potential water contamination due to depressurization of water systems, which may have allowed Volatile Organic Compounds to be drawn into the water system through the main line.</td>
</tr>
<tr>
<td>1F</td>
<td>Air quality monitoring and testing for metals and Volatile Organic Compounds to date has found that contaminants are not at levels of concern and not hazardous to human health. More funding is needed for more long-term monitoring systems once FEMA assistance is no longer available.</td>
</tr>
</tbody>
</table>
### SUMMARY OF FINDINGS

#### 1G
A consolidated and comprehensive plan for environmental monitoring and sampling is necessary to fully inform conditions and response actions. The Department of Health is contracting with an entity to develop and execute a comprehensive environmental monitoring and sampling plan that will address characterization of environmental contamination in multiple media. The Department will need additional funds to conduct and perform its core functions and is requesting FEMA to cover this cost.

#### 2 Debris Removal and Disposal

<table>
<thead>
<tr>
<th>2A</th>
<th>Debris removal in Lahaina is split into two phases:</th>
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<tbody>
<tr>
<td></td>
<td>• Phase 1: Removal of hazardous materials dangerous to human health, animals, and the environment, which will be done by the EPA; and</td>
</tr>
<tr>
<td></td>
<td>• Phase 2: Consolidated debris removal, which will begin after Phase 1 is completed, consisting of removing ash and remaining debris and soil testing to ensure the area is free of any leached toxins.</td>
</tr>
</tbody>
</table>

| 2B | A temporary debris storage and removal site is proposed to be located at the current Olowalu Recycling and Refuse Center. There are issues with the permitting timeline before debris disposal can begin, but once the Olowalu site is approved and permitted, debris removal can begin, minimizing much of the air and water quality concerns stemming from the ash and other contaminants still in the area. |

| 2C | The Maui County Environmental Protection and Sustainability Division is handling abandoned vehicle disposal and recycling. Vehicles damaged in the fire are more easily recycled than undamaged vehicles. Vehicles are considered abandoned if there are no open insurance claims and no one has claimed it; these vehicles are treated to remove contaminants and will be shipped to the continental United States to be recycled and disposed of. |
# SUMMARY OF FINDINGS

## FOOD, WATER AND OTHER SUPPLIES WORKING GROUP

### 1 Distribution Management Plan Maintenance

#### 1A
HI-EMA annually maintains the Hawai‘i State Distribution Management Plan, which details the process for an effective and efficient distribution of critical resources during a crisis. Three distribution efforts that form the foundation of the Distribution Management Plan:

- **Distribution Management (Resupply):** Overseeing the movement of critical resources from suppliers to disaster survivors;
- **Pre-Staged Supplies:** Supplies pre-staged within the State in anticipation of disasters to bridge the gap between the catastrophic event and the opening of emergency supply lines; and
- **Commodity Points of Distribution (C-PODs) Operations:** Centralized initial accessible points where the public can obtain life-sustaining emergency relief supplies.

#### 1B
Under the current Hawai‘i State Distribution Management Plan, forecast advisories and conditions for natural and man-made occurrences are the primary triggers for plan implementation. HI-EMA should consider whether adding to the list all other foreseeable incident types that may impact the State, including wildfires.

#### 1C
Hawai‘i currently lacks a comprehensive process for community stakeholders to provide input on the Hawai‘i State Distribution Management Plan, which can lead to inefficiencies in disaster response, potential misallocation of resources, and a lack of transparency in decision-making processes.

#### 1D
Although "Unified Coordination" was implemented for primary federal, state, and county government incident management activities, the Hawai‘i State Distribution Management Plan should:

- Be more structured to instruct emergency responders in coordinating and communicating with the community regarding supply distribution issues; and
- Seamlessly integrate county initiatives.

#### 1E
In the immediate aftermath of the Lahaina wildfire, before governmental emergency response became fully operational, communities across the State, including private organizations and citizens, exhibited commendable teamwork to provide supplies for those affected. Despite the fact that supply distribution hubs were established island wide and run largely by community volunteers and strong community willingness to help with distributions, distribution sites were
limited. To be effective, the Hawai‘i State Distribution Management Plan should explicitly outline strategies to optimally harness private-sector contributions during emergencies.

1F Information was often scarce in the immediate aftermath of the Lahaina wildfire, as most cellular and broadband services were unavailable or severely limited due to fire damage and power outages. Some were able to access the Internet after mobile hotspots were deployed, but locating available supplies remained difficult as it took time to stand up websites with appropriate bandwidth and accessibility to provide key information on supply availability and distribution.

1G Other gaps in supply distribution, including language access and animal welfare, are not adequately addressed in the Hawai‘i State Distribution Management Plan.

2 Emergency Prescriptions Refills

During times of natural disasters or public health emergencies, patients' ability to timely receive necessary prescriptions may be impeded by:

- Periods of limited office hours of providers; and
- Lack of permanent authority for pharmacists to fill prescriptions during these times.

3 Emergency Surge Personnel

3A Following a disaster, certain governmental agencies may be required to perform various emergency functions in addition to normal core functions. Emergency personnel surge capabilities are needed to assist in governmental emergency response, particularly when agencies are understaffed or the emergency is so widespread that it greatly surpasses an agency's ability to timely respond, which impacts individuals' and families' ability to obtain food, water, and other supplies.

3B The federal Intergovernmental Personnel Act authorizes surge personnel to be borrowed from other departments if they are cross-trained. This model could be discussed, evaluated, and investigated for potential implementation in Hawai‘i.
State emergency management laws authorize the HI-EMA Administrator to establish an Emergency Management Reserve Corps of trained specialists to support state and county emergency, disaster, or day-to-day requirements. Establishing a standing volunteer "Emergency Response Corps" or "Surge Capacity Force" during non-crisis conditions and maintaining readiness through intermittent training would allow fast deployment in the aftermath of a catastrophic event to help support response and recovery efforts.

### 4 Food Bank Reserves

| 4A | Food banks have filled a critical need during disaster situations. |
| 4B | Food bank reserves were already low before the Lahaina wildfire and are further depleted now, and the cost of food is rising. |
| 4C | The major issues hindering the Hawai‘i Foodbank are storage capacity and funding. |
| 4D | Hawai‘i is an outlier in that the Hawai‘i food banks receive no regular operational or food purchase funding outside of the grant-in-aid process. Regular funding and expanded storage capacity would help to ensure that the Hawai‘i Foodbank is able to meet the daily food needs of all in Hawai‘i and be more resilient to respond in emergencies. |

### 5 Hot Food Donations Standards Outreach

| 5A | Hot food donations are a critical resource for evacuees following a disaster event. |
| 5B | To encourage the donation of food that would otherwise go to waste, state law provides civil and criminal liability protections for good-faith donors of food, including prepared hot foods, which are especially needed after disasters events when individuals and families are evacuated to shelters where they cannot store food and lack access to cooking facilities. |
| 5C | The Department of Health has developed guidance for safe donations of food, including ready-to-eat, temperature-controlled hot foods, by permit holders. It is important that food establishments are regularly made aware of these hot food donation standards, particularly during emergency periods when hot foods are urgently needed. |

### 6 "Right to Garden" Law

| 6A | Continued economic stress persists after a disaster, requiring funding for food support (e.g., SNAP, D-SNAP). |
| 6B | Any disaster event affecting the operability of the State's main seaport, the Port of Honolulu, has the potential to disrupt or even cut off food resupply across the State, including most FEMA resupplies. |
| 6C | Some individuals and families rely on food assistance programs after a disaster; however, these programs take time to implement in disaster areas, resulting in food insecurity immediately following a disaster. |
| 6D | Home gardens would substantially strengthen Hawai‘i’s food security, yet the right to garden is not guaranteed under state law. |
### JOBS AND BUSINESS WORKING GROUP

#### 1 Unemployment Insurance Division and System Strengthening

| 1A | The surge in unemployment claims due to the Maui wildfires has overtaxed DLIR's Unemployment Insurance Division staff and systems. |
| 1B | The impact of the wildfires on Maui businesses and, by extension, businesses can be categorized into three tiers of impact: |
|     | • Tier 1: Businesses whose physical structures were catastrophically destroyed or partially damaged; |
|     | • Tier 2: Businesses that lost power, functioning sewer service, or safe drinking water, or any combination of these, in the weeks following the wildfires, forcing them to modify their operations or shut down entirely until service can be restored; and |
|     | • Tier 3: Businesses outside of the affected areas that observed a considerable decline in revenues corresponding to the precipitous drop in tourists to Maui following the news of the wildfires. |
| 1C | Many businesses were forced to lay off workers. The unemployment rate for Maui was 2.7% for the second quarter of 2023, before the Maui wildfires, and the unemployment rate for Maui is projected to soar over 11% in the fourth quarter of 2023, an average of 6.5% for 2024, and 4.5% for 2025. |
| 1D | DLIR waived the HireNet registration and work search requirements for Maui claimants, beginning with all initial unemployment insurance claims received on August 6, 2023, to allow eligible unemployment insurance claimants to receive their benefits without having to certify work search requirements for weekly claims. |
| 1E | Due to the wave of initial unemployment insurance claims and the easing of eligibility requirements, there has been an increase in weekly payouts. However, DLIR believes there are sufficient funds in the Unemployment Compensation Trust Fund to address the claims without need for legislative intervention. |
| 1F | Federal Disaster Unemployment Benefits is available to workers, business owners, and self-employed individuals in the County of Maui who became unemployed or had their work hours reduced or interrupted due to the Maui wildfires and do not qualify for regular unemployment insurance. |
### SUMMARY OF FINDINGS

| 1G | Many wildfire victims may be ineligible for state unemployment insurance benefits because they continue to experience trauma and are therefore not ready and willing to accept work. Federal Disaster Unemployment Assistance has been made available for some of these individuals. |
| 1H | There are several conditions of unemployment and general eligibility requirements that must be met in order to receive federal Disaster Unemployment Assistance benefits. DLIR devised a questionnaire to assess the most appropriate unemployment insurance benefits program for claimants, which reduced wait time to find out eligibility for various programs. Additionally, DLIR and partners implemented new ID proofing processes through Login.gov and in person at United States Postal Service locations. |
| 1I | Despite DLIR’s efforts to meet the demands of the unemployment surge, the volume of claims continues to overwhelm the Department, which has several vacant positions that, if filled, would alleviate the workload divided among the staff. |
| 1J | Efforts to address the rise in unemployment claims are hampered by the antiquated mainframe used to process regular unemployment insurance claims. As of November 2023, DLIR had posted the award of its mainframe modernization project and was in the process of negotiating the contract. |

#### 2 Workforce Development Initiatives in Construction

| 2A | The anticipated demand for construction tradespersons in Maui to rebuild is approximately 2,000 more than the anticipated pre-fire forecast demand. This rebuilding effort will compete against other existing or anticipated construction projects in the State for this workforce, so local training programs are needed to meet the demand and not further exacerbate the housing crisis with a large migration of off-island workers into Maui. |
| 2B | Various organizations, including UH Maui College’s apprenticeship and training programs, the Council for Native Hawaiian Advancement’s Hawaiian Trades Academy, and DLIR’s Registered Apprenticeship programs, have already expanded existing workforce development offerings or developed new opportunities for construction tradespersons or those interested in clean-up and rebuild-related jobs, with the goal of "upskilling" into high-demand jobs. |
SUMMARY OF FINDINGS

2C The U.S. Department of Labor awarded an initial $10.5 million National Dislocated Worker Grant to the State to provide people with temporary jobs focused on cleaning up debris and repairing damage caused by the fires and providing humanitarian assistance to the wildfire survivors. On November 3, 2023, DLIR announced the availability of 300 positions for eligible impacted workers through the DLIR Workforce Development Division and Maui Economic Opportunity, Inc. Target populations of workers include individuals with Limited English Proficiency, immigrants, homeless individuals or those with housing insecurity, migrant populations, and long-term unemployed individuals.

3 Child Care Services Availability

3A Residents are finding it difficult to return to work with the lack of child care providers nearby.

3B Several child care facilities and preschools were destroyed in the wildfires, thereby preventing many workers from reentering or remaining within the workforce and requiring other workers to commute long distances to access child care providers. Employers have also identified the lack of child care as one of the key barriers to workers accepting employment.

3C There are several initiatives in development to increase prekindergarten educational services availability in West Maui:

- The Bezos Academy in Lahaina, part of the Kaiāulu o Kūkū‘ia project, is set to open in 2025 as a free, year-round preschool program offering full-day programming for 40 children and breakfast, lunch, and take-home dinner meal services;
- A public preschool classroom at Princess Nāhi‘ena‘ena Elementary School to be installed by August 2024; and
- A temporary school in Nāpili, below the Kapalua Airport, for students and staff displaced by the destruction of King Kamehameha III Elementary School and within which the Lieutenant Governor is advocating for the inclusion of prekindergarten educational services.

4 Business Assistance Due to Extraordinary Circumstances

4A Business owners are finding it difficult to stabilize their existing economic situations and plan for the future.
**SUMMARY OF FINDINGS**

| 4B | For Tier 1 businesses that have suffered fire damage, it is uncertain whether the businesses will be able to rebuild in the same area, particularly for businesses that operated along the shoreline. Tier 2 businesses have stated that the County of Maui has not provided any timeline on the progress of restoring their affected utilities, and this uncertainty has led many to lose employees who need dependable income streams. Additionally, several businesses are still being required to pay rent or mortgages, even if the business location is closed or has burned down. |
| 4C | Full economic recovery in West Maui will be a long, slow process, with many indicators suggesting that full recovery, including a pre-fire unemployment rate, is not expected to occur until 2028. |
| 4D | To assist in the recovery and to stabilize the economic situation for small businesses, the U.S. Small Business Administration offers two types of disaster loans to assist eligible businesses that have been affected by a declared disaster:  
  - Business physical disaster loans to repair or replace disaster-damaged property owned by the business, including real estate, inventories, supplies, machinery and equipment; and  
  - Economic injury disaster loans, which are working capital loans to help small businesses and most private, non-profit organizations of all sizes through the disaster recovery period by meeting their ordinary and necessary financial obligations that cannot be met as a direct result of the disaster. |
| 4E | As of October 25, 2023, the U.S. Small Business Administration had approved 398 business loans for nearly $60 million. However, not all businesses in the State are accessing these loans because:  
  - Some are hesitant to apply as they are still paying off COVID-19 disaster loans;  
  - Some are being denied because they are unable to demonstrate they have the ability to repay the loan; and  
  - Some have been denied because they have lost their physical space, equipment, and inventory and are unable to stand up another location to immediately bring in revenue. |
| 4F | DBEDT and partners launched the Maui Business Bridge Grant Program on November 13, 2023, to provide grants to eligible businesses in Maui that have experienced the direct and indirect impacts of the wildfires. |
**SUMMARY OF FINDINGS**

<table>
<thead>
<tr>
<th>5</th>
<th><strong>Responsible, Respectful, and Compassionate Tourism</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>5A</td>
<td>With visitors slowly returning to Maui, the need for responsible, respectful, and compassionate tourism is greater than ever before to ensure that visitors do not retraumatize employees.</td>
</tr>
<tr>
<td>5B</td>
<td>In the immediate aftermath of the wildfires, the number of visitors to Maui dropped by approximately 75%, representing an estimated $13 million loss of visitor spending per day. While visitors are slowly returning to Maui, the number of visitors is not expected to reach pre-fire forecast levels until 2028.</td>
</tr>
<tr>
<td>5C</td>
<td>Although there were conflicting messages on social media and news stories immediately following the wildfires on whether tourists should be visiting Maui, the Hawai‘i Tourism Authority launched the Maui Marketing Recovery Plan, which is centered around the Mālama Maui campaign and prioritizes rebuilding travel demand from the U.S. market to Maui.</td>
</tr>
<tr>
<td>5D</td>
<td>The Mālama Maui campaign educates visitors to engage in responsible, respectful, and compassionate travel to Maui and specifically asks visitors to refrain from inquiring about a resident’s personal experience with the disaster, thereby asking the resident to relive the trauma, and informs visitors that Lahaina Town remains off-limits. This effort is closely related to and accomplishes much of the intent behind the Maui Nui Destination Management Action Plan 2021-2023.</td>
</tr>
</tbody>
</table>
### SCHOOLS WORKING GROUP

#### 1 Need for School Evacuation Plans

1A Each public school statewide has an operational Emergency Action Plan and a Pre-Designated Evacuation Site and annually conducts evacuation, tsunami, earthquake, lockdown, and shelter-in-place drills, with mandatory fire and active shooter drills also required or to be developed.

1B The Working Group questions the adequacy of the evacuation plans and learned that the DOE had difficulty communicating the plans with parents and students during the crisis. Evacuation plans need to be rehearsed to ensure readiness should another natural or man-made emergency occur during school operating hours.

1C The Department of Transportation completed an alternate evacuation route for Lahaina area public schools before they reopened and is working on an additional emergency evacuation route in that area.

#### 2 Learning Options for Displaced Department of Education Students

2A The DOE provides various instructional options for displaced West Maui community public school students:
- Distance/online learning;
- Attending public schools outside of the impacted areas, with bus service to and from these alternate school locations;
- Learning hubs in West Maui, which provide a structured learning environment, are operated by DOE employees, and provide services for students with special needs and students from Kaiapuni (Hawaiian immersion) schools.

2B During natural disaster designations, the DOE may assemble temporary structures to hold public school classes. A temporary public school at the Pulelehua planned community development site in Nāpili is being constructed as a long-term, interim, fully functional DOE school for students and staff displaced due to the destruction of King Kamehameha III Elementary School.

2C The DOE has leased and purchased flex-space classrooms to increase learning space capacity at Maui Waena Intermediate School in Kahului and Princess Nāhiʻenaʻena Elementary School in Lahaina.
### Potential Health Hazards at School Sites; Monitoring Systems

| 3A | There are short-term and long-term hazards resulting from fires that may be detected through testing of soil, water, air, and ash. There are many unknowns about the health effects of exposure to chemical mixtures and the effect of low-level exposure over time to contaminants. The chemicals and metals released from burning of manmade infrastructure and materials may include: heavy metals, Polycyclic Aromatic Hydrocarbons, Volatile Organic Compounds, aldehydes, and asbestos. |
| 3B | Soil testing for heavy metals and dioxins was conducted at Lahaina school not out of necessity but out of an abundance of caution, and the results show that the levels were all within standards and soils are considered safe. |
| 3C | No destruction or fire damage to any of the properties in the water distribution area above Lahainaluna was found, and there was no recorded loss of water pressure. Drinking water quality is not a concern at this time, and standard procedures will be maintained. Regular testing of water will be conducted. Flushing of all water lines was completed on October 2, 2023. |
| 3D | Baseline air sampling was conducted to measure how much of specific contaminants (certain metals, asbestos, particulate matter, and Volatile Organic Compounds) were present in the air over a period of time. The results indicate that no metals or asbestos samples exceeded reference levels, and particulate matter and Volatile Organic Compounds were detected but below levels that are known to cause acute health problems or below levels that are to be expected in comparable areas. |
| 3E | Several air quality monitoring methods for measuring PM 2.5 have been deployed and are ongoing, with some data publicly available. These methods include real-time monitoring, external sensors installed at the three Lahaina-area schools, and handheld air sensors at schools. |
| 3F | High-efficiency particulate air filters are in all DOE and charter schools at risk of certain natural disasters. There is an Air Quality Action Plan for Schools that establishes school actions for different concentrations of PM 2.5. Measures to reduce exposure are ramped up as PM 2.5 concentrations increase. |
| 3G | Ash testing is scheduled to be conducted. |
### SUMMARY OF FINDINGS

<table>
<thead>
<tr>
<th>4</th>
<th>Mental Health Support Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>4A</td>
<td>Several mental health and trauma services preexisted the Maui wildfires and continue to be offered, while additional staff, services, support, and training have been added to aid community members, families, and students in the wake of the Maui wildfires.</td>
</tr>
<tr>
<td>4B</td>
<td>With the mental health care provider shortage, there are concerns about not only accessing a mental health professional but also the ability of the available providers to accommodate ethnic, cultural, and social considerations to connect with youth and achieve successful healing.</td>
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</tbody>
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<tr>
<th>5</th>
<th>Traffic Impacts in Reassigning Displaced Students and Staff</th>
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<tbody>
<tr>
<td></td>
<td>All public schools in the Lahaina area are now located in the same area off Lahainaluna Road, which has raised concerns among community members about the increase in vehicular traffic congestion.</td>
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<tr>
<th>6</th>
<th>Student Promotion and Graduation Timelines</th>
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<tbody>
<tr>
<td>6A</td>
<td>DOE elementary and secondary schools have 180 mandatory instructional days that include 1,080 student hours. The Board of Education has the discretion to grant waivers from the minimum instructional time requirements to individual schools.</td>
</tr>
<tr>
<td>6B</td>
<td>Due to school disruptions, some high school students may not meet the minimum course and credit requirements required by Board of Education policy to receive a diploma.</td>
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<tr>
<th>7</th>
<th>Displaced Students Faced Disruption and Challenges in School Athletics Programs</th>
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<tbody>
<tr>
<td></td>
<td>Waivers of restrictions on participation of certain student-athletes are available in certain circumstances but did not cover student-athletes in Hawai‘i who switched schools in unplanned ways due to the Maui wildfires. &quot;Disaster rules&quot; by the local leagues are made only after a disaster is officially designated, and disaster rules issued after the Maui wildfires disaster designation limited, rather than maximized, student-athletes' participation in athletic programs.</td>
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<tr>
<th>8</th>
<th>Federal Hazard Mitigation Funding Opportunities for Schools</th>
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<tbody>
<tr>
<td></td>
<td>FEMA offers a variety of hazard mitigation funding opportunities to reduce or eliminate the long-term risk to people and property from future disasters. The opportunity most relevant to schools is the Hazard Mitigation Grant Program,</td>
</tr>
</tbody>
</table>
which can be used for projects such as reinforcing school buildings to be more wind- and earthquake-resistant, elevating school buildings to reduce flood risk, installing backup generators, and creating safe rooms for shelter during storms.

### 9 Building and Rebuilding Resilient Schools

The fire resilience of Hawai‘i’s school buildings and environments should be improved. Many school buildings in Hawai‘i are currently vulnerable to fire hazards due to:

- Surrounding landscapes that consist of highly flammable vegetation; and
- A lack of modern fire suppression systems and a lack of fire-resistant materials and construction practices.

### 10 Funding Support for Schools

**10A** The United States Army Corps of Engineers is designing and overseeing the installation of the interim DOE school for students and staff displaced due to the destruction of King Kamehameha III Elementary School. While the estimated construction cost has yet to be determined, the State’s share of the cost is expected to be capped at 10%.

**10B** HI-EMA is currently receiving capital improvement project funds for the Hawai‘i State Shelter Retrofit Program, which seeks to increase the number and improve the quality of available emergency shelters in Hawai‘i by providing funding to retrofit existing structures to be used as emergency shelters.
### SHELTER WORKING GROUP

1. **Hawai‘i is in a Housing Crisis**

   1A. Hawai‘i has the highest housing costs in the nation. Less than 1/3 of households can afford a median-priced single-family home, and less than 1/2 can afford a median-priced condo. Hawai‘i also has the highest percentage of homeowners paying more than 30% of their income on their mortgage and the highest rental prices in the nation, with Maui having the highest median posted rental prices within the State.

   1B. One clear contributor to high housing prices in Hawai‘i is the lack of housing supply. Hawai‘i has only added 27,000 homes to the housing stock over the last five years, a little more than 1/2 of the housing necessary to support the State's population.

   1C. Hawai‘i’s climate and natural features contribute to high demand for housing from people outside of Hawai‘i. Survey data shows that 52% of out-of-state owners leave their units vacant or utilize them seasonally. Maui and Kaua‘i have lost existing housing stock, likely due to out-of-state owners leaving units vacant and converting housing stock to vacation rentals. The impact of short-term rentals is most significant on Kaua‘i and Maui, with 15% of the housing stock consisting of vacation rentals and many of the units highly concentrated in certain towns, including Lahaina.

   1D. Studies show that new housing construction reduces housing prices and that housing regulations slow the rate of construction and lead to higher prices. Hawai‘i has the most regulated housing market in the country, and multiple reports and studies have cited the State's regulatory environment as a key factor in high housing costs in Hawai‘i.

2. **The Housing Crisis Has Been Exacerbated by the Maui Wildfires**

   2A. The Maui wildfires damaged 3,631 properties, 60% of which were rental housing, and included a significant number of units targeted for low-income families.

   2B. The loss of these housing units comes with a surge in demand in the rental market, as displaced families compete for limited housing stock on Maui.

   2C. Lost residential structures are valued at $554 million, representing 3% of Maui’s housing stock, while the cost estimate to rebuild is $5.52 billion. This discrepancy is due to the fact that many of the residential structures were habitable but...
aged, and the cost to rebuild while meeting updated energy and building code requirements at current construction costs is significant.

3 Current Federal, State, and County Action on Housing Relief

3A On September 8th, 2023, Maui Mayor Bissen signed the fourth emergency proclamation in response to the wildfires, suspending Maui County zoning and building and construction codes to ensure the expeditious discharge of emergency management functions.

3B There have been 12,153 individual referrals to FEMA housing, 5,072 of which have been deemed ineligible for FEMA support. Eligibility for FEMA support includes, among other things, United States citizenship, residency as a renter or an owner in a home in the affected area, and a lack of homeowner’s insurance that covers displacement costs.

3C FEMA’s goal is to move all eligible displaced individuals out of hotels and into suitable long-term housing by February 10, 2024, although the State may request an extension. FEMA will cover 175% of Fair Market Rate for rental costs at varying rates per number of bedrooms. Homeowners with Federal Housing Administration mortgage insurance are eligible for foreclosure moratorium and forbearance.

3D Some opportunities for housing significant numbers of displaced residents include:

- Conversion of short-term rentals to long-term rentals;
- Direct leasing by FEMA of existing buildings with the intent to sublease units back to displaced residents; and
- Modular units with infrastructure installed by FEMA that could later be repurposed for permanent housing needs and homeless transitional housing or other uses. The Joint Housing Task Force is working to identify appropriate sites for modular units and estimates six to nine months to build interim prefab units.

3E In approximately 18 months, FEMA’s disaster support will end, and the State and Maui County can access other funds to fill long-term needs.

3F Private entities have begun building temporary housing on private land. However, the County of Maui is in the process of developing emergency zoning rules allowing the legal use of those units as temporary housing.

4 Assistance for Individuals who are Ineligible for FEMA Relief
SUMMARY OF FINDINGS

4A Several populations are ineligible for FEMA assistance. They include:
- Non-U.S. citizens, such as undocumented immigrants and Compacts of Free Association (COFA) migrants; and
- Those who were unhoused before the disaster.

4B Shelter assistance available to FEMA-ineligible individuals includes the following:
- FEMA rental assistance and Temporary Assistance for Needy Families Non-Recurring Short-Term Benefits Program benefits for U.S. citizens who are children of FEMA-ineligible individuals;
- American Red Cross is funding the sheltering of 145 FEMA-ineligible households, including young families and pre-disaster unhoused who have children or medical conditions, in hotel units until at least February 10, 2024; for the remaining FEMA-ineligible households, the Department of Human Services has built temporary transitional housing near the Kahului Airport and intends to use the space for six months while the Governor’s Coordinator on Homeless works on longer-term housing using the Kauhale model;
- The Host Housing Support Program offers each host family who takes in an affected resident $375 per month per individual, up to $1,500 for six months; and
- Every family, regardless of eligibility for FEMA assistance, may receive an American Red Cross case manager to help navigate federal, state, county, and non-governmental organization programs.

5 Rebuilding of Lahaina is Outside the Scope of this Report

5A The rebuilding of Lahaina will first require time to heal and determine what the community envisions for the future of the town, so it is premature for the Legislature to weigh in on rebuilding. The Working Group therefore does not intend to make any recommendations on this matter but merely notes the many complexities of rebuilding.

5B The full extent of damage from the Maui wildfires is still unknown, and there is a lack of readily available labor and supplies.

5C There are concerns that kamaʻāina families could be pushed out of a gentrifying Lahaina due to the following:
- Many of the homes lost in the fire were older homes that were passed down through generations and were no longer mortgaged, so many were uninsured or underinsured. Anecdotal reports have been made of speculative offers on these properties;
### SUMMARY OF FINDINGS

- Newly constructed homes will likely rent for higher prices than aging homes;
- Much of Lahaina was developed under old building codes and zoning standards. Shoreline setbacks, roadway standards, building codes, and parking requirements are some of the code changes that complicate rebuilding, and these codes cannot be simply waived, as was done after Hurricane Iniki on Kaua‘i, because FEMA funding and insurance will likely require that new buildings meet current codes and be built outside of hazard areas; and
- The replacement of Lahaina’s older housing stock with new homes.

### Many Gaps and Challenges Remain

| 6A | The primary challenge to securing permanent housing for displaced families is the lack of available housing stock. |
| 6B | Maui County’s current zoning laws and severe lack of infrastructure make it impossible for many home conversions or other solutions to be legally permitted, thereby depriving homeowners who could house displaced families of rental income potential and other assistance. |
| 6C | The more than 3,000 applicant families receiving FEMA support for housing will likely face a gap in benefits as federal supports will expire before families can rebuild in Lahaina. In 18 to 24 months, many households will likely have to simultaneously cover a mortgage and rent. |
| 6D | While Governor Green has issued a moratorium on rent hikes and eviction due to non-payment of rent, the moratorium does not prohibit cancellations of month-to-month leases or eviction due to a landlord housing a family member. There are concerns that tenants may be forced out of their housing to make room for families displaced by the fires, and these tenants cannot access current state or federal relief programs. |
| 6E | Due to a lack of on-the-ground interpreters and document translation services from federal, state, and county service providers, limited English proficient individuals and immigrants face significant barriers to accessing services. |
| 6F | There are no guaranteed long-term supports for fire victims who are ineligible for federal relief programs, and existing law does not require the State to support these families in the aftermath of a natural disaster. |
| 6G | The disaster has put a strain on other vulnerable populations, such as victims of domestic violence. Maui’s domestic violence shelter has seen a doubling of call volume to their hotline since the wildfires, and an increase in domestic violence may increase rates of homelessness among women and children. |
## WILDFIRE PREVENTION WORKING GROUP

### 1 Call to Action: Wildfires are a growing threat in Hawai‘i

#### 1A
The annual area burned by wildfires in the State has increased 300% between 1904 to 2022. Large fires have occurred on all islands and happen multiple times each year across the State. Every year, about 0.50% of the State’s total land area burns.

#### 1B
Wildfires destroy watersheds and change soil, which threaten native species and their forest habitats and decrease aquifer recharge, affecting our drinking water sources.

#### 1C
Heavy rain events after fires cause erosion and loss of topsoil that leaves areas completely bare and unable to support vegetation. Post-fire erosion fills streams with sediment, ultimately depositing the sediment in the oceans, which smothers coral reefs and impacts nearshore water quality, fisheries, and long-term reef ecosystem health.

#### 1D
Climate projections indicate that areas of highest fire risk are predicted to shift upward in elevation, increasing the threat to watershed resources.

### 2 Causes of Wildfires in Hawai‘i

#### 2A
99% of wildfires are caused by human ignitions. Accidental ignitions are a top cause of wildfires and include sources such as campfires, equipment, vehicles, downed power lines, and fireworks.

#### 2B
26% (approximately 1,000,000 acres) of the State’s total land area has been invaded by non-native, fire-prone grasses and shrubs that can form continuous fuel beds, ignite easily, attain extremely high fine fuel loads, and are capable of growing back more vigorously in the post-fire environment than most native vegetation. The grass-fire cycle perpetuates the problem, as each time fire burns into native forest, it allows the opportunity for non-native species to flourish.

#### 2C
Climate is a central determinant of wildfire occurrence and behavior, and climate change has been linked to increases in fire activity.

### 3 Current Challenges to Wildfire Prevention and Response

#### 3A
Hawai‘i spends less than other states on wildfire prevention and response.
### SUMMARY OF FINDINGS

#### 3B
Declines in active agriculture land use have reduced maintenance and access to roads, water sources, equipment, and assistance, which previously supported firefighting.

#### 3C
Wildfires are a threat to human life as communities have developed on former agricultural land over the last several decades. Many neighborhoods in Hawai‘i have fire hazard issues that threaten life.

#### 3D
Hawai‘i has not adopted building standards that would better protect structures against wildfires.

#### 3E
Most communities in the State do not yet have well-developed and comprehensive emergency preparedness and disaster response plans. Many of those communities that have Firewise plans have not necessarily integrated those Firewise plans into broader and more holistic emergency preparedness and disaster response plans.

#### 3F
During the Maui wildfires, the counties were not able to utilize the Intrastate Mutual Aid Act under Chapter 127D, Hawaii Revised Statutes, to share additional firefighting resources.

#### 3G
Hawai‘i is the only state without a State Fire Marshal. The responsibilities of a state fire marshal are currently carried out by the State Fire Council.

#### 3H
There are some county fire companies within the State operating with staffing levels below the national standard.

### 4 Current Strengths of Wildfire Prevention and Response

#### 4A
Social infrastructure (relationships across agencies, engaged communities, educational resources, and community-driven plans) is a strength in addressing wildfire prevention and response.

#### 4B
Local and indigenous knowledge for fuels management (traditional agriculture practices, grazing, ecosystem restoration, plant propagation, and historic uses of water) is a strength in addressing wildfire prevention and response.

#### 5C
Science and technology fundamentals (high-resolution fire history data, current and future fire probability maps, fuels maps, climate data, best practices for post-fire, and fuels mitigation) are a strength in addressing wildfire prevention and response.

#### 4D
Hawai‘i’s unique and evolving law regarding water usage, which holds that water remains in the public trust, is a strength in addressing wildfire prevention and response.
Summary of Recommendations

ENVIRONMENTAL REMEDIATION WORKING GROUP

1 Funding for Long-Term Nearshore Monitoring Efforts

DLNR should be funded for the following:
- To support regular ongoing chemical/physical coastal water quality testing and storm sampling;
- To support characterizing thousands of organic compounds, fish/invertebrate contaminants, in-water and sediment contaminants, and autosamplers to measure carbonate chemistry, with instrumentation for continuous measurement of flow, salinity, depth, temperature, pH, oxygen, chlorophyll, and dissolved organic fluorescence; and
- Aquatic biologist positions to support long-term water quality monitoring and pollution source detection.

2 Funding for Air and Water Quality Monitoring Efforts

The Department of Health should be funded for the following air and water quality monitoring efforts:
- A position to support additional air monitoring needs; and
- Expansion of monitoring stations in Kula and Lahaina, including equipment and maintenance.

3 Coastal Wetland Restoration

The feasibility of restoring the historical wetland area in Lahaina that had been drained and used for development should be studied, as there may be an opportunity for re-development that is better aligned with existing knowledge that considers the need for resilience measures, climate adaptation, and environmental protection. In order to consider the feasibility of various wetland restoration projects, the following should be assessed or analyzed:
- The historical boundaries of the former wetland complex;
- Vegetation, hydrology, and land surface elevation to determine the current landscape;
• Whether water would need to be pumped into the area, whether fill needs to be removed, and how vegetation would be replanted or encouraged to grow from an existing seedbank; and
• Community and cultural engagement around the wetland to describe spiritual, cultural, and environmental benefits.

4 Ongoing/Sustainable Funding for Natural Resource Management

Enhanced funding to effectively manage the State’s natural resources is critical. With the growing wildfire risk in Hawai‘i, the Working Group highlights the following:

• The need for increased investment in conservation and restoration of native ecosystems and for invasive species control to prevent future events and increase resilience in the wake of them;
• Sustained funding to prepare a dedicated workforce to help with these efforts, to support partners, and to make capital investments;
• The potential for a visitor impact fee to offset the environmental toll of tourism by providing an additional revenue source for environmental protection, natural resource management, and other efforts that are part of wildfire mitigation and will reduce environmental contamination from wildfires in the long term.
## SUMMARY OF RECOMMENDATIONS

### FOOD, WATER AND OTHER SUPPLIES WORKING GROUP

1. **Distribution Management Plan Maintenance**
   The State should establish a comprehensive Distribution Management Plan that encompasses all disasters and topic and ensures that HI-EMA and the counties have a coordinated plan by:
   - Mandating the establishment of a comprehensive Distribution Management Plan under state law; or
   - Establishing a framework for the plan to be reviewed and approved by an advisory board.

2. **Emergency Prescription Refills**
   The State should enact a law to allow pharmacists to provide medication to patients without interruption during emergencies, as is effective under Governor Josh Green, M.D.'s Eighth Proclamation Relating to Wildfires. The Working Group specifically suggests codifying the suspension of Chapter 328, HRS, to the extent necessary to allow pharmacists to refill active prescriptions for persons directly impacted by an emergency if unable to readily obtain refill authorization from the prescriber.

3. **Emergency Surge Personnel**
   The State should implement and facilitate programs and initiatives to provide personnel support for disaster response. This can include:
   - Cross-training state employees for temporary surge deployments for critical services;
   - Funding new positions within departments that provide critical services;
   - Creating a mechanism to surge staffing when needed; and
   - Deploying volunteer state employees to support response and recovery efforts.

4. **Food Bank Reserves**
   The State should set aside funding to ensure that food banks have adequate storage capacity, labor, and food reserves for their normal and emergency operations.
### SUMMARY OF RECOMMENDATIONS

<table>
<thead>
<tr>
<th></th>
<th><strong>5  Hot Food Donation Standards Outreach</strong></th>
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<tbody>
<tr>
<td></td>
<td>The Department of Health should conduct outreach after disasters to ensure that food establishments understand the standards for safely donating hot foods.</td>
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<th><strong>6  &quot;Right to Garden&quot; Law</strong></th>
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<tbody>
<tr>
<td></td>
<td>The State should enact a &quot;right to garden&quot; law that protects individuals’ right to grow food at their residence.</td>
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</tbody>
</table>
**SUMMARY OF RECOMMENDATIONS**

**JOBS AND BUSINESS WORKING GROUP**

1 **Unemployment Insurance Division and System Strengthening**
   1A To adequately address surges in unemployment claims, the Unemployment Insurance Division of the Department of Labor and Industrial Relations must be properly staffed and supported with a system to efficiently process and manage claims.
   1B The Unemployment Insurance Division is encouraged to fill the vacant positions within the Division.
   1C The Department of Labor and Industrial Relations is encouraged to work with the contractor to expedite the modernization of the Unemployment Insurance Division's antiquated mainframe system.

2 **Workforce Development Initiatives**
   2A Existing initiatives are providing the opportunities for unemployed persons with the education and training to upskill into high-demand jobs.
   2B The University of Hawai‘i Maui College should be provided with additional resources to expand the Career and Technical Education apprenticeship program for hiring adjunct faculty.
   2C Nonprofit organizations that offer certification classes, training, and apprenticeships for living wage employment opportunities are encouraged to apply for grants-in-aid from the State during the Regular Session of 2024.
   2D The DOE is encouraged to promote trade career pathways in middle and high school to assist with the anticipated demands of the State's labor and construction workforce.

3 **Child Care Services Availability**
   The development of child care services in West Maui should be encouraged to allow workers to return to work.

4 **Business Assistance Due to Extraordinary Circumstances**
   4A Efforts should be made to assist businesses in these extraordinary circumstances.
   4B The United States Small Business Administration is encouraged to work with Hawai‘i’s Congressional delegation to explore options to maximize available assistance to Maui businesses.
### SUMMARY OF RECOMMENDATIONS

**4C** Lenders are encouraged to consider the extraordinary circumstances of the Maui wildfires to reach an amicable resolution with businesses when constructing mortgage relief and forbearance agreements.

**4D** The County of Maui is encouraged to:
- Communicate firmer updates on timelines for infrastructure restoration;
- Establish a designated federal resource navigator to assist and inform persons, including small businesses, of the resources available to them; and
- Develop a process to expedite the permitting of infrastructure and buildings, especially for businesses that are still capable of operating.

**5** **Responsible, Respectful, and Compassionate Tourism**

**5A** Initiatives should promote responsible, respectful, and compassionate tourism.

**5B** Additional resources are encouraged for the Hawai‘i Tourism Authority to continue its Mālama Maui campaign and implementation of the Maui Nui Destination Management Action Plan.

**5C** The development of a visitor mobile application should be examined, which could assist in promoting responsible, respectful, and compassionate tourism and promote areas of the State that are available and ready to accept visitors.
### SUMMARY OF RECOMMENDATIONS

#### SCHOOLS WORKING GROUP

1  **Grant Public Access to Certain Evacuation Plans and Expand Campus Drill Plans**

1A The **DOE** and Department of Transportation should assess all **DOE** school campuses to determine if there are sufficient emergency evacuation routes statewide.

1B The **DOE** should grant public access to Emergency Action Plans that do not pose a security risk to students, staff, or guests visiting school campuses so that communities have an opportunity to assess whether these emergency plans are adequate for student and staff safety and operational readiness.

1C Each **DOE** school should have a comprehensive school evacuation communication plan in place for use during emergencies. The plan should:

- Identify key stakeholders and communication channels;
- Include a communication protocol and process for updating the protocol;
- Require regular testing and rehearsal of the plan;
- Incorporate multiple communication channels and alternatives;
- Be culturally responsive;
- Involve the community; and
- Be shared with all students, parents, guardians, and staff at the beginning of the school year. Contact information for all students, parents, and guardians should be collected upon distribution of the plan and updated.

2  **Ready Alternate Learning Options and Student Support for Displaced Students**

2A The **DOE** should create a process to quickly hire or reposition **DOE** personnel to better accommodate distance learning and learning alternatives so that all learning options are made available to families sooner.

2B **DOE** schools should keep the **DOE** apprised of underutilized classroom space that could be used by displaced students and staff when necessary.
The DOE should monitor student progress throughout the school year to see if disruptions affect students’ progress and, if so, ensure resources can be deployed to offer additional instructional hours or opportunities for support or requisite courses.

3 Monitor Potential Health Risks

The DOE and Department of Health should establish a disaster protocol. The protocol should include the following features:

- A comprehensive universal checklist that sets conditions, including any acceptable alternatives, that a school must meet in order to be cleared to reopen or remain open following a disaster. The status of each checklist item should be publicly available on the DOE’s website as efforts progress;
- Testing data and future testing plans that are publicly available on the DOE’s website as they become available; and
- Minimization of ash contamination to schools from cleanup and communication of ash removal before work begins to allow parties to discuss strategies to minimize downwind contamination of schools.

4 Increase Mental Health Care Access

The Legislature should continue efforts, such as creating incentives for local providers to stay in or return to the State, expanding pipelines to train professionals, and improving access to mental health care providers, to increase the number of mental health care professionals within the State.

5 Traffic Mitigation for West Maui

The DOE should monitor traffic congestion in the immediate vicinity of the Lahaina schools area and mitigate vehicular traffic congestion by:

- Using Maui Police Department Traffic Guards to control traffic flow; and
- Implementing staggered school start times, subject to collective bargaining negotiations.
## SUMMARY OF RECOMMENDATIONS

### 6 Student Athletics Consideration

The Hawaii High School Athletics Association should:
- Craft rules or guidelines to give student-athletes greater flexibility to continue participating in sports as they move between one or more schools as a result of a disaster; and
- Create a process for impacted member leagues of the Association to petition for adjustment of any rules or guidelines as needed for specific situations.

### 7 Building Resilient Schools

- **7A** Regulations and guidelines for fire-resistant landscaping around school buildings should be developed and enforced, and landscaping should be regularly maintained to remove dead vegetation and reduce fire fuel.
- **7B** Older school buildings should be retrofit with fire suppression systems, and all new school construction projects should include these systems.
- **7C** Older school buildings should be retrofit to improve their fire resistance by upgrading materials and adding fire barriers, and buildings should be regularly inspected and maintained to ensure the materials remain effective.
- **7D** Building codes that require the use of fire-resistant materials in the construction and renovation of school buildings, such as fire-rated walls, doors, windows, roofing materials, and insulation, should be enforced.

### 8 Maximizing Use of Federal Funds

- **8A** The DOE should carefully review the eligibility requirements of federal programs to determine which programs are the best fit for the Department’s needs and consider applying for FEMA hazard mitigation funding to help schools make necessary investments to reduce their risk from natural disasters and protect the safety of their students and staff in the event of a future disaster.
- **8B** The Legislature should consider appropriating state funds to help extend or supplement federal disaster aid that may expire.
### SHELTER WORKING GROUP

#### 1 Leveraging State Financing Options

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<tr>
<td><strong>1A</strong></td>
<td>Low-Income Housing Tax Credit (LIHTC) projects already funded with a match from the Rental Housing Revolving Fund and a portion of the State’s private activity bond allocation should be expedited by expediting county approvals and permitting and adding shifts of construction workers.</td>
</tr>
<tr>
<td><strong>1B</strong></td>
<td>The Legislature and HHFDC should provide additional support if insurance does not fully cover the costs to rebuild burned structures that were financed through LIHTC or other public funds to ensure the long-term affordability of these projects.</td>
</tr>
<tr>
<td><strong>1C</strong></td>
<td>The Hawai‘i Public Housing Authority should develop a plan to replace its destroyed units in a timely manner.</td>
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<tr>
<td><strong>1D</strong></td>
<td>HHFDC should work with developers to ensure additional housing projects are ready to be built and funded on Maui. If there is a sufficient pipeline, a larger portion of the State’s private activity bond volume should be allocated to Maui for the next three to five years to ensure more LIHTC projects are built to help families in the 60% of AMI and below range.</td>
</tr>
<tr>
<td><strong>1E</strong></td>
<td>State funds should be effectively leveraged with the Maui County Affordable Housing Fund and Community Development Block Grant - Disaster Recovery funds. HHFDC should lead coordination efforts to help developers create the appropriate financing mix to create more long-term housing on Maui.</td>
</tr>
<tr>
<td><strong>1F</strong></td>
<td>The Legislature should appropriate additional funds for “Tier 1” households with income at 60% of AMI and below and “Tier 2” households with income from 60% to 100% of AMI, specifically on Maui. The Legislature should also designate recurring sources of funding for these purposes.</td>
</tr>
<tr>
<td><strong>1G</strong></td>
<td>HHFDC should take the lead and work with the County of Maui to acquire the Haggai Institute in South Maui and begin rehabilitation of the facility to be used for long-term workforce housing.</td>
</tr>
</tbody>
</table>
| 1H | The Dwelling Unit Revolving Fund should be fully utilized and possibly expanded, or one or more revolving funds should be created to assist with the construction of housing on Maui as follows:  
- HHFDC should reinstate its low-interest loan program to enable affected homeowners to rebuild and recover their homes and communities.  
- HHFDC should expand the Dwelling Unit Revolving Fund Equity Pilot Program to also assist impacted Maui homeowners looking for low-interest financing.  
- Allow the Dwelling Unit Revolving Fund to be used to provide low-interest loans for accessory dwelling units that can be used to house displaced families and alleviate the broader housing crisis in Hawai‘i.  
- The Legislature and HHFDC should identify parcels in strategic locations for future housing developments on Maui and possibly acquire the land and develop the parcels to increase housing capacity. |
<p>| 1I | HHFDC should identify, and the Legislature should fund, strategic regional infrastructure upgrades on Maui to help spur the development of housing outside the core burn zone. |
| 2 | Streamlining Regulatory Burdens |
| 2A | The Legislature should reduce zoning and regulatory barriers and permitting fees for additional dwelling units, multifamily housing, and prefab housing within the urban state land use district in order to increase affordability statewide and give homeowners more flexibility over the use of their properties. |
| 2B | The Legislature should coordinate and/or task appropriate agencies to create a model statewide emergency zoning law to allow certain properties to temporarily host shelters after the declaration of a state of emergency or local state of emergency. |
| 3 | Utilizing Short-Term Rentals for Long-Term Housing |
| 3A | Maui County should incentivize short-term rental owners to convert to long-term housing through tax incentives or other necessary means. |
| 3B | The Legislature should authorize the counties to phase out non-conforming short-term rentals as a tool to create long-term housing and ensure that the counties have all the authority needed to regulate legal and illegal short-term rentals. |</p>
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<thead>
<tr>
<th></th>
<th><strong>Housing Vulnerable Populations</strong></th>
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<tbody>
<tr>
<td><strong>4A</strong></td>
<td>The Department of the Attorney General should continue to investigate and monitor non-profits for potentially fraudulent activity involving assistance to non-citizens.</td>
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<tr>
<td><strong>4B</strong></td>
<td>The Legislature should identify supportive programs for non-citizens, including a possible infusion of funds to the Temporary Assistance for Other Needy Families program for those with children.</td>
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<tr>
<td><strong>4C</strong></td>
<td>The temporary tent site near Kahului Airport should be converted into a longer-term housing solution.</td>
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<tr>
<td><strong>4D</strong></td>
<td>The Legislature should pass a comprehensive law that allows construction of either ‘Ohana Zone or Kauhale sites to be streamlined without the need for an emergency proclamation.</td>
</tr>
<tr>
<td><strong>4E</strong></td>
<td>The Legislature and State Insurance Commissioner should monitor the increase in homeowners’ insurance premiums, ensure premiums are attainable and reasonable, and ensure that homeowners have options if private insurers withdraw from doing business in Hawai‘i.</td>
</tr>
<tr>
<td><strong>4F</strong></td>
<td>The Legislature should consider temporary mortgage forbearance, homeowners association fee forbearance, and a foreclosure moratorium on homes rendered uninhabitable due to natural disasters.</td>
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</table>
### WILDFIRE PREVENTION WORKING GROUP

#### 1 Reducing Ignitions

<table>
<thead>
<tr>
<th>1A</th>
<th>Create a public awareness campaign about preventing ignitions.</th>
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<tr>
<td>1B</td>
<td>Increase criminal penalties for arson in the fourth degree during red flag warnings. Enhance the ability of law enforcement to remove arsonists from a community.</td>
</tr>
<tr>
<td>1C</td>
<td>Increase monetary penalties for violations of state fire protection laws in Chapter 132, HRS, to improve compliance with state and county fire codes.</td>
</tr>
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</table>
| 1D | Impose a statewide limitation on consumer fireworks by:  
  - Authorizing the sale and use of consumer fireworks only for cultural purposes by permit only and disallowing the noncultural use of fireworks on New Year’s Eve, the Fourth of July, and Chinese New Year’s Day; and  
  - Enforcing state and county laws related to the trafficking, sale, and use of fireworks. |
| 1E | Develop best practices regarding downed power lines and electrical power supplies during times of possible ignition. Utilize technologies to rapidly identify fault locations, eliminate the power available to cause ignition, and enable rapid repairs. |
| 1F | Promote strategic undergrounding of utility lines in priority fire hazard risk areas and all new utility line developments. |
| 1G | Engage with counties, community organizations, and encampments to manage lands and reduce the risk of wildfires. |
| 1H | Increase support for practices that increase the infiltration and retention of water in the soil, enhancing groundwater recharge. |
| 1I | Increase support for native plant nurseries and seed banking initiatives to provide inventory for watershed restoration projects and projects that restore ecosystems to natural fire patterns. |

#### 2 Reducing Fuel Loads

| 2A | Establish additional resources, incentives, and policies to encourage mitigation actions, especially where land use is changing. |
### SUMMARY OF RECOMMENDATIONS

**2B** Establish new requirements to promote the creation and maintenance of “defensible space” by public and private property owners, with proactive enforcement and legal consequences for violations.

**2C** Preparedness planning, infrastructure improvements, and reducing fuels to increase safety and effectiveness of firefighting efforts.

**2D** Support large-scale green waste processing or composting to help landowners who want to reduce fuels.

**2E** Create incentives for managed grazing as a fuel reduction tool and encourage more managed grazing permits on state lands, where appropriate.

**2F** Include high fuel load and high fire risk as factors considered in determining location of forest restoration projects using state and county funding.

**2G** Assess estimated costs of different fuels management strategies (mowing, grazing, green strips, restoration) to provide options to landowners.

**2H** Strengthen biosecurity efforts to prevent the introduction of new non-native flammable plant species into the State and support early detection and rapid response when new plant species are discovered.

**2I** Active state engagement in cross-boundary land partnerships that share resources to create a larger ecosystem that is conducive to sustainable agriculture and reducing fuel loads in a holistic manner.

**2J** Prioritize incentives for sustainable local food production when considering various land management practices and strategies.

### 3 Community Engagement

**3A** Encourage Firewise Communities to help communities adapt to living with wildfire and encourage neighbors to work together and take action now to prevent losses.

**3B** Support development of Community Wildfire Protection Plans across the State.

**3C** Modify existing emergency preparedness and disaster mitigation plans to incorporate Community Wildfire Protection Plans where necessary. Implement planning processes that consistently and continuously identify state and county resources needed to effectuate these plans.
### 3D
Seek permanent funding for community programs, landowner wildfire education and technical support, and multi-partner wildfire risk reduction planning.

### 4 Protecting Communities

| 4A | Develop an inventory of best practices for planning, zoning, development review, and code enforcement to address and reduce wildfire hazards and risks. |
| 4B | Work with the Public Utilities Commission and Hawai‘i State Energy Office to develop best practices and laws regarding electrical infrastructure and power lines. |
| 4C | Update building standards to better protect structures against wildfires. |
| 4D | Incorporate fire hazard mitigation standards for community planning, design and engineering. The State Building Code Council should consider adoption of the International Wildland-Urban Interface Code, which has requirements to determine the level of wildfire risk, vegetation management and mitigation, and flexibility to modify “areas at risk” over time. |
| 4E | Work with industry experts, such as the Insurance Institute for Business and Home Safety and National Institute for Standards and Technology, to develop home hardening guidance. |
| 4F | Create tax or insurance incentives for wildfire-safe structures. |
| 4G | Disincentivize land banking through increased taxation of lands not being used for public purposes or managed through an appropriate conservation plan. |
| 4H | Review other states’ models for creation of a State Fire Marshal with enforcement authority and investigators. |
| 4I | Expand the network of HI-EMA sirens and upgrade capacity with cameras or other technology as it becomes available. |

### 5 Wildfire Suppression

| 5A | Increase response capacity by state and county personnel. |
| 5B | Consider the creation of volunteer fire departments in rural or remote areas where fire response is limited. |
| 5C | Support setting a state staffing standard ensuring all county fire companies maintain staffing levels that, at minimum, meet the national standard. |
### SUMMARY OF RECOMMENDATIONS

| 5D | Maintain and update wildfire-specific equipment and wildfire-suppression infrastructure statewide (firefighting aircraft, dip tank expansion, reservoir restoration). |
| 5E | Negotiate standing agreements to use privately-owned water storage sources or other firefighting resources where available. |
| 5F | Expand wildland fire training opportunities across all response agencies, with consideration of the standards set by the National Incident Management System and the National Wildfire Coordinating Group. |
| 5G | Ensure counties’ ability to provide intrastate mutual firefighting aid. |
| 5H | Authorize Hawai‘i to participate in a State Wildfire Compact to support efficiently moving fire resources interstate. |

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<thead>
<tr>
<th>6</th>
<th>Post-Fire Response</th>
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<tbody>
<tr>
<td>6A</td>
<td>Provide resources for post-fire rehabilitation efforts, such as erosion control, long-term forest restoration, planting native species where possible, and suppressing and removing weeds.</td>
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<td>6B</td>
<td>Where appropriate, consider use of hydro-spray short grasses appropriate for grazing as an independent measure or one to be used in conjunction with planting native trees.</td>
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<td>6C</td>
<td>Develop greater local capacity and resources for post-fire assessments, like Bare Area Emergency Response (BAER) Teams. The U.S. Forest Service BAER teams are specially trained professionals that can quickly respond after a wildfire to minimize future harm to people, property, or natural resources.</td>
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<tr>
<th>7</th>
<th>Wildfire Research</th>
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<tbody>
<tr>
<td>7A</td>
<td>Perform a water resources assessment to better understand the availability of water resources for fire suppression and prevention/mitigation efforts such as green firebreaks.</td>
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<tr>
<td>7B</td>
<td>Assess seed production and storage, evaluate needs for a seed bank and/or nursery to deliver seeds and seedlings to public and private landowners whose properties are affected by wildfires.</td>
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<td>7C</td>
<td>Evaluate the use of “green” firebreaks created through the strategic planting of water-rich, fire-resistant native species that help to halt the spread of wildfires.</td>
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<tr>
<td>7D</td>
<td>Perform fire assessment/mapping to determine areas of high risk to help prioritize mitigation and prevention efforts.</td>
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### SUMMARY OF RECOMMENDATIONS

| 7E | Build upon existing research on the complex impacts of climate change on wildfire regimes, especially the risks of compounding hazards associated with extreme weather events such as hurricanes and drought. |
| 7F | Analyze the extent to which hydrological drought impacts wildfire susceptibility in Hawai‘i, to include analysis of the connection between low ground water levels and increased fire activity. |
| 7G | Examine other ecosystem benefits of wildfire mitigation actions and their use as practical incentives for promoting better land use practices. |